

## SEQUENCE LISTING

<110> SPECHT, THOMAS  
HINZMANN, BERND  
SCHMITT, ARMIN  
PILARSKY, CHRISTIAN  
DAHL, EDGAR  
ROSENTHAL, ANDRE

<120> HUMAN NUCLEIC ACID SEQUENCES FROM NORMAL BREAST TISSUE

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<151> 1999-03-19

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<212> DNA  
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 <212> DNA  
 <213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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 <213> Homo sapiens

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<210> 44

<400> 44  
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 <211> 538  
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 <213> Homo sapiens

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<210> 47  
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 <212> DNA  
 <213> Homo sapiens

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<210> 48  
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<212> DNA  
<213> Homo sapiens

<400> 48

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<212> DNA  
<213> Homo sapiens

<400> 49

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&lt;213&gt; Homo sapiens

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&lt;211&gt; 850

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<213> Homo sapiens
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ggcactcg	ggagggagag	gaccccccgc	cacatcctcc	ttccccagga	cctgagctcc	1260
cagcatctgc	agacgacccc	cgcagcatt	ccctcgacc	cccctcgaag	ccccctggac	1320
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cactccccaa	atacagaggt	ctgcttcaa	ggggagacca	tttccaggcc	ttattgagac	1440
cagccccaa	gtccccccacc	cccatcctgc	tccagcg	cctctaacag	ggaccagctc	1500
tccgcttgc	ccccacgggg	ttcctctaac	cagaaccagc	ttccttagct	cgtagagacc	1560
aaaggccg	cccgctgtct	ggggttcctc	ccagcacccc	agctgctgg	ctgccctt	1620
tgccctctgg	cctccagctg	ggtgtgggg	ggcggacaag	gcgggggaca	gacgcagcac	1680
cttcttagcg	atctaggcc	ggcaagagct	ctggcccaa	ggcctcctct	tcccagggc	1740
tgccaagtcc	tggccctgg	cctggcatat	caccccgac	tgtggggcca	ggcaccacta	1800
gcctggctca	aatattcccc	agggagactg	ctgtgtgtct	cccgctg	tgctggctct	1860
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<210> 72  
<211> 814  
<212> DNA  
<213> Homo sapiens
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<400> 72
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gtcctaactc tgcggggctg cagcttcctg catgatgctg gggagcttgg cgccctgaccc 180
aggatctaga aggcaactctg ggcaggccgc gctccgcccga aaggtacc caaccctctg 240
ggatagatgc aggaagcgat ggtaagacc cattttcacc caacttctcg ccgcagtctg 300
gcttaccaca cgctcctccc cattcccagt gagccgctt ttgcagcacc aggcgaacac 360
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tgatcacaca gattcctact tgggctctt ccttaatct tcggaggctg agtttgcaca 480
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ttctcttcac cttatcaaaa cctgagctaa aaccaatgca tcagctgtat atgacacgcag 600
agagtggcag ggctgaggac ccaaagtcat ttcccaggt ggcggagaat aaactgccag 660
ggagaagaat gagaagacag gagacaaact gtttggaaag ctaaatcttc cctcttaatg 720
aataaagggtt tttgccttgc cttaaaaaat aacaggaaga agcagggaaa aataaaataac 780
ttatggtaat ctggattgt attttgtat atta 814

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<210> 73

<400> 73  
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<210> 74  
<211> 747  
<212> DNA  
<213> Homo sapiens

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<400> 74
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agagcggcga gccgctgggg cccggggcccg atctgtgggc cgacgtggac ctcaccgagt 120
tcgaccagta cctcaactgc agccggactc ggccccqacgc ccccccgggctc ccgttaccacg 180
tqqqactqqc caaaactqqqc ccqqcqccca tqtctctqqcc aqaqqqaaqc aqccctgatct 240
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ccgcgcgtgct ggacgcgcgc agcgccgtct attacagcgc gtgcacatctcc ggcttagggccg 300  
 cccggcgcgc cccgggtccct gcagcgcttc ctccccgcgc ccccgccgacc gatccgaccg 360  
 cgtcgcgtgcc gctctgtct ctcatacgcg tttatgtttt gttccatgtc acagccccct 420  
 aggagccagt gatgctcgcc cttgcgcgcg ttccacctcc caggccaccc ttccctggct 480  
 tctggccac ctgcgcctcg ggggcccctg cgagggtgcc tggagttccc acgtgtcccg 540  
 gggctttcc aggaagcccg agcccaggac ctgttggcag agttgccagg gttacattt 600  
 tgaagcacct gctccctttc ttgcagtgtt tttctacaa ccagattgtt ttaatatttt 660  
 ttactttgcc cttttaaaaa atatacccaa tacaatataat ttaatttttta attaaactct 720  
 taaaactttc ttccaagaga aaggagc 747

<210> 75

<400> 75  
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<210> 76

<211> 2419

<212> DNA

<213> Homo sapiens

<400> 76

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 gccgagtggg gcagggcagt tctgctttat tcagccctcg catgagcggc tgctaaggcc 180  
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 gggatcgcac cgttggcac tgcgaggcga gtggccggct ttctgtttct gcctgtccc 420  
 tccccacggc acctgggtcc caggtaaaaa taaaaggagg ggagaaggatg agaacagaac 480  
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 cttectgca gatgaaacta tttagaaaggg tcttagattt tggcaggtag gctttggagc 600  
 aggccgcac acatttctga gcatgaggac gagctacagc agtcctggg gtggggctgc 660  
 ctgcgggatg gcgggagagg atgccttggc gaaccgtccct cccagtgtgg aaggcccttt 720  
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tggggggcgc agatccacgc cttgctgccc ttctttcatg aagtctgttt ttttaagtgc 2160  
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 atctgacaat gtaaaaaaa 2419

<210> 77  
 <211> 366  
 <212> PRT  
 <213> Homo sapiens

<400> 77  
 Ile Ala Ser Ala Arg Leu Glu Glu Val Thr Gly Lys Leu Gln Val Ala  
 1 5 10 15  
 Arg Asn Leu Ile Met Arg Gly Thr Glu Met Cys Pro Lys Ser Glu Asp  
 20 25 30  
 Val Trp Leu Glu Ala Ala Arg Leu Gln Pro Gly Asp Thr Ala Lys Ala  
 35 40 45  
 Val Val Ala Gln Ala Val Arg His Leu Pro Gln Ser Val Arg Ile Tyr  
 50 55 60  
 Ile Arg Ala Ala Glu Leu Glu Thr Asp Ile Arg Ala Lys Lys Arg Val  
 65 70 75 80  
 Leu Arg Lys Ala Leu Glu His Val Pro Asn Ser Val Arg Leu Trp Lys  
 85 90 95  
 Ala Ala Val Glu Leu Glu Glu Pro Glu Asp Ala Arg Ile Met Leu Ser  
 100 105 110  
 Arg Ala Val Glu Cys Cys Pro Thr Ser Val Glu Leu Trp Leu Ala Leu  
 115 120 125  
 Ala Arg Leu Glu Thr Tyr Glu Asn Ala Arg Lys Val Leu Asn Lys Ala  
 130 135 140  
 Arg Glu Asn Ile Pro Thr Asp Arg His Ile Trp Ile Thr Ala Ala Lys  
 145 150 155 160  
 Leu Glu Glu Ala Asn Gly Asn Thr Gln Met Val Glu Lys Ile Ile Asp  
 165 170 175  
 Arg Ala Ile Thr Ser Leu Arg Ala Asn Gly Val Glu Ile Asn Arg Glu  
 180 185 190  
 Gln Trp Ile Gln Asp Ala Glu Glu Cys Asp Arg Ala Gly Ser Val Ala  
 195 200 205  
 Thr Cys Gln Ala Val Met Arg Ala Val Ile Gly Ile Gly Ile Glu Glu  
 210 215 220  
 Glu Asp Arg Lys His Thr Trp Met Glu Asp Ala Asp Ser Cys Val Ala  
 225 230 235 240

His Asn Ala Leu Glu Cys Ala Arg Ala Ile Tyr Ala Tyr Ala Leu Gln			
245	250	255	
Val Phe Pro Ser Lys Lys Ser Val Trp Leu Arg Ala Ala Tyr Phe Glu			
260	265	270	
Lys Asn His Gly Thr Arg Glu Ser Leu Glu Ala Leu Leu Gln Arg Ala			
275	280	285	
Val Ala His Cys Pro Lys Ala Glu Val Leu Trp Leu Met Gly Ala Lys			
290	295	300	
Ser Lys Trp Leu Ala Gly Asp Val Pro Ala Ala Arg Ser Ile Leu Ala			
305	310	315	320
Leu Ala Phe Gln Ala Asn Pro Asn Ser Glu Glu Ile Trp Leu Ala Ala			
325	330	335	
Val Lys Leu Glu Ser Glu Asn Asp Glu Tyr Glu Arg Ala Arg Arg Leu			
340	345	350	
Leu Ala Lys Ala Arg Thr Val Pro Pro Pro Gly Cys Ser			
355	360	365	

&lt;210&gt; 78

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 78

Met Arg Thr Ser Lys Phe Ile Leu Phe Ile Phe Ser Asp Val Gly Asn			
1	5	10	15

Gly Leu Gly Phe Lys Arg Glu Leu Glu Glu Gly Met Phe Asp Ser His			
20	25	30	

Arg Arg Phe Leu Gln Gln Met Pro Leu Leu Ala Ile Ser His Phe Phe			
35	40	45	

Pro Gln Ile Leu Pro Thr Glu Ala Gln Ala Phe Thr Val Ser			
50	55	60	

&lt;210&gt; 79

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 79

Arg Pro Arg Leu Tyr Lys Ala Lys Arg Lys Thr Thr Asn Gly Val Val			
1	5	10	15

Leu Cys Cys Ile Ala Leu His Lys Ile Arg Asn Arg Cys Leu Thr Ile			
20	25	30	

Glu Phe Val Phe Cys Glu Phe

35

<210> 80  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 80  
Lys Thr Pro Ser Leu Gln Ser Lys Thr Lys Asn Asn Lys Trp Ser Cys  
1 5 10 15

Ala Met Leu Tyr Cys Phe Ala Gln Asn  
20 25

<210> 81  
<211> 29  
<212> PRT  
<213> Homo sapiens

<400> 81  
Asp Pro Val Ser Thr Lys Gln Asn Glu Lys Gln Gln Met Glu Leu Cys  
1 5 10 15

Tyr Val Val Leu Leu Cys Thr Lys Leu Gly Thr Gly Val  
20 25

<210> 82  
<211> 32  
<212> PRT  
<213> Homo sapiens

<400> 82  
Pro Lys Arg Arg Val Ser Asp Thr Ser Ser Gly Pro Thr Pro Cys Met  
1 5 10 15

Glu Pro Ile Leu Gly Arg Thr His Tyr Ser Gln Leu Arg Lys Lys Ser  
20 25 30

<210> 83  
<211> 54  
<212> PRT  
<213> Homo sapiens

<400> 83  
Leu Gly Gln Asp Ser His Gln His Ile Thr His Val Leu Leu Gly Arg  
1 5 10 15

Glu Lys Gln Tyr Ile Pro Val Glu Arg Ser Gln Ser Ile Ser Gly Arg  
20 25 30

Asn Val Val Lys Gly Gly Arg Cys Tyr Ala Ala Ala Pro Ser Val Pro  
35 40 45

Glu Val Ala Val Ile Pro

50

<210> 84  
<211> 54  
<212> PRT  
<213> Homo sapiens

<400> 84  
Gly Asp Gln Ala His Arg Glu Gln Gly Lys Glu Gln Ala Met Phe Asp  
1 5 10 15

Lys Lys Val Gln Leu Gln Arg Met Val Asp Gln Arg Ser Val Ile Ser  
20 25 30

Asp Glu Lys Lys Val Ala Leu Leu Tyr Leu Asp Asn Glu Glu Glu  
35 40 45

Asn Asp Gly His Trp Phe  
50

<210> 85  
<211> 116  
<212> PRT  
<213> Homo sapiens

<400> 85  
Gly Thr Arg His Pro Leu Ser Leu Ser His Lys Pro Ala Lys Lys Ile  
1 5 10 15

Asp Val Ala Arg Val Thr Phe Asp Leu Tyr Lys Leu Asn Pro Gln Asp  
20 25 30

Phe Ile Gly Cys Leu Asn Val Lys Ala Thr Phe Tyr Asp Thr Tyr Ser  
35 40 45

Leu Ser Tyr Asp Leu His Cys Cys Gly Ala Lys Arg Ile Met Lys Glu  
50 55 60

Ala Phe Arg Trp Ala Leu Phe Ser Met Gln Ala Thr Gly His Val Leu  
65 70 75 80

Leu Gly Thr Ser Cys Tyr Leu Gln Gln Leu Leu Asp Ala Thr Glu Glu  
85 90 95

Gly Gln Pro Pro Lys Gly Lys Ala Ser Ser Leu Ile Pro Thr Cys Leu  
100 105 110

Lys Ile Leu Gln  
115

&lt;210&gt; 86

<400> 86  
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<210> 87  
 <211> 71  
 <212> PRT  
 <213> Homo sapiens

<400> 87  
 Asn Arg Gly Gly Val Gly Phe Gly Val Gly Trp Ser Leu Pro Phe Glu  
 1 5 10 15

Leu Leu Ile Phe Met Ser Arg Leu Gln Asn Ser Arg Val Gly Leu Thr  
 20 25 30

Met Trp Gly Gly Gly Ser Ser Leu Phe Phe Tyr Phe Gln Val His  
 35 40 45

Ser Trp Gly Trp Trp Gly Gly Arg Arg Ile Pro Leu Pro Lys Pro Leu  
 50 55 60

Val Cys Ala Glu Leu Ala Leu  
 65 70

<210> 88  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 88  
 Tyr Arg His Glu Pro Leu Tyr Pro Ala Phe Pro Tyr Lys Ile Gln Arg  
 1 5 10 15

Glu Asn Phe Tyr Thr Phe Ile Pro Gln Ile Lys Gln Val Leu Ser Ser  
 20 25 30

Tyr Arg Ala Leu Ala Arg Ser Ile Cys Lys Arg Asn Leu Lys Phe Ser  
 35 40 45

Cys Arg Ile Lys Leu Asp Lys  
 50 55

<210> 89  
 <211> 411  
 <212> PRT  
 <213> Homo sapiens

<400> 89  
 Leu Ala Thr His Ser Pro Gln Lys Ser His Gln Cys Ala His Cys Glu  
 1 5 10 15

Lys Thr Phe Asn Arg Lys Asp His Leu Lys Asn His Leu Gln Thr His  
 20 25 30

Asp Pro Asn Lys Met Ala Phe Gly Cys Glu Glu Cys Gly Lys Lys Tyr  
 35 40 45

Asn Thr Met Leu Gly Tyr Lys Arg His Leu Ala Leu His Ala Ala Ser

50	55	60
Ser Gly Asp Leu Thr Cys Gly Val Cys Ala Leu Glu Leu Gly Ser Thr		
65	70	75
Glu Val Leu Leu Asp His Leu Lys Ala His Ala Glu Glu Lys Pro Pro		
85	90	95
Ser Gly Thr Lys Glu Lys Lys His Gln Cys Asp His Cys Glu Arg Cys		
100	105	110
Phe Tyr Thr Arg Lys Asp Val Arg Arg His Leu Val Val His Thr Gly		
115	120	125
Cys Lys Asp Phe Leu Cys Gln Phe Cys Ala Gln Arg Phe Gly Arg Lys		
130	135	140
Asp His Leu Thr Arg His Thr Lys Lys Thr His Ser Gln Glu Leu Met		
145	150	155
Lys Glu Ser Leu Gln Thr Gly Asp Leu Leu Ser Thr Phe His Thr Ile		
165	170	175
Ser Pro Ser Phe Gln Leu Lys Ala Ala Ala Leu Pro Pro Phe Pro Leu		
180	185	190
Gly Ala Ser Ala Gln Asn Gly Leu Ala Ser Ser Leu Pro Ala Glu Val		
195	200	205
His Ser Leu Thr Leu Ser Pro Pro Glu Gln Ala Ala Gln Pro Met Gln		
210	215	220
Pro Leu Pro Glu Ser Leu Ala Ser Leu His Pro Ser Val Ser Pro Gly		
225	230	235
Ser Pro Pro Pro Pro Leu Pro Asn His Lys Tyr Asn Thr Thr Ser Thr		
245	250	255
Ser Tyr Ser Pro Leu Ala Ser Leu Pro Leu Lys Ala Asp Thr Lys Gly		
260	265	270
Phe Cys Asn Ile Ser Leu Phe Glu Asp Leu Pro Leu Gln Glu Pro Gln		
275	280	285
Ser Pro Gln Lys Leu Asn Pro Gly Phe Asp Leu Ala Lys Gly Asn Ala		
290	295	300
Gly Lys Val Asn Leu Pro Lys Glu Leu Pro Ala Asp Ala Val Asn Leu		
305	310	315
Thr Ile Pro Ala Ser Leu Asp Leu Ser Pro Leu Leu Gly Phe Trp Gln		
325	330	335
Leu Pro Pro Pro Ala Thr Gln Asn Thr Phe Gly Asn Ser Thr Leu Ala		
340	345	350
Leu Gly Pro Gly Glu Ser Leu Pro His Arg Leu Ser Cys Leu Gly Gln		
355	360	365

Gln Gln Gln Glu Pro Pro Leu Ala Met Gly Thr Val Ser Leu Gly Gln  
 370 375 380  
 Leu Pro Leu Pro Pro Ile Pro His Val Phe Ser Ala Gly Thr Gly Ser  
 385 390 395 400  
 Ala Ile Leu Pro His Phe His His Ala Phe Arg  
 405 410

<210> 90  
 <211> 314  
 <212> PRT  
 <213> Homo sapiens

<400> 90  
 Lys Arg Cys Gln Arg Lys Gln Pro Leu Arg Gly Ile Gly Ile Leu Lys  
 1 5 10 15

Gln Ala Ile Asp Lys Met Gln Met Asn Thr Asn Gln Leu Thr Ser Ile  
 20 25 30

His Ala Asp Leu Cys Gln Leu Cys Leu Leu Ala Lys Cys Phe Lys Pro  
 35 40 45

Ala Leu Pro Tyr Leu Asp Val Asp Met Met Asp Ile Cys Lys Glu Asn  
 50 55 60

Gly Ala Tyr Asp Ala Lys His Phe Leu Cys Tyr Tyr Tyr Tyr Gly Gly  
 65 70 75 80

Met Ile Tyr Thr Gly Leu Lys Asn Phe Glu Arg Ala Leu Tyr Phe Tyr  
 85 90 95

Glu Gln Ala Ile Thr Thr Pro Ala Met Ala Val Ser His Ile Met Leu  
 100 105 110

Glu Ser Tyr Lys Lys Tyr Ile Leu Val Ser Leu Ile Leu Leu Gly Lys  
 115 120 125

Val Gln Gln Leu Pro Lys Tyr Thr Ser Gln Ile Val Gly Arg Phe Ile  
 130 135 140

Lys Pro Leu Ser Asn Ala Tyr His Glu Leu Ala Gln Val Tyr Ser Thr  
 145 150 155 160

Asn Asn Pro Ser Glu Leu Arg Asn Leu Val Asn Lys His Ser Glu Thr  
 165 170 175

Phe Thr Arg Asp Asn Asn Met Gly Leu Val Lys Gln Cys Leu Ser Ser  
 180 185 190

Leu Tyr Lys Lys Asn Ile Gln Arg Leu Thr Lys Thr Phe Leu Thr Leu  
 195 200 205

Ser Leu Gln Asp Met Ala Ser Arg Val Gln Leu Ser Gly Pro Gln Glu  
 210 215 220

Ala Glu Lys Tyr Val Leu His Met Ile Glu Asp Gly Glu Ile Phe Ala  
 225                    230                    235                    240  
 Ser Ile Asn Gln Lys Asp Gly Met Val Ser Phe His Asp Asn Pro Glu  
 245                    250                    255  
 Lys Tyr Asn Asn Pro Ala Met Leu His Asn Ile Asp Gln Glu Met Leu  
 260                    265                    270  
 Lys Cys Ile Glu Leu Asp Glu Arg Leu Lys Ala Met Asp Gln Glu Ile  
 275                    280                    285  
 Thr Val Asn Pro Gln Phe Val Gln Lys Ser Met Gly Ser Gln Glu Asp  
 290                    295                    300  
 Asp Ser Gly Asn Lys Pro Ser Ser Tyr Ser  
 305                    310

<210> 91  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens

<400> 91  
 Val Leu Gln Glu Lys Ile Lys Ile Lys Lys Glu Lys Lys Glu Lys Ile  
 1                    5                    10                    15  
 Lys Phe Lys Asn Cys Phe Glu Asn Val Gln Ile Lys Ser Asn Ile Leu  
 20                    25                    30

Ile Ile His Leu His Val Leu Leu Asn Ile Leu Ile Met Trp Met Phe  
 35                    40                    45

Thr Leu Cys Met Ile Leu Ala Glu Tyr His  
 50                    55

<210> 92  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<400> 92  
 Met Asp Leu Ser Leu Leu Trp Val Leu Leu Pro Leu Val Thr Met Ala  
 1                    5                    10                    15

Trp Gly Gln Tyr Gly Asp Tyr Gly Tyr Pro Tyr Gln Gln Tyr His Asp  
 20                    25                    30

Tyr Ser Asp Asp Gly Trp Val Asn Leu Asn Arg Gln Gly Phe Ser Tyr  
 35                    40                    45

Gln Cys Pro Gln Gly Gln Val Ile Val Ala Val Arg Ser Ile Phe Ser  
 50                    55                    60

Lys Lys Glu Gly Ser Asp Arg Gln Trp Asn Tyr Ala Cys Met Pro Thr

65	70	75	80
Pro Gln Ser Leu Gly Glu Pro Thr Glu Cys Trp Trp Glu Glu Ile Asn			
85		90	95
Arg Ala Gly Met Glu Trp Tyr Gln Thr Cys Ser Asn Asn Gly Leu Val			
100		105	110
Ala Gly Phe Gln Ser Arg Tyr Phe Glu Ser Val Leu Asp Arg Glu Trp			
115		120	125
Gln Phe Tyr Cys Cys Arg Tyr Ser Lys Arg Cys Pro Tyr Ser Cys Trp			
130		135	140
Leu Thr Thr Glu Tyr Pro Gly His Tyr Gly Glu Glu Met Asp Met Ile			
145		150	155
Ser Tyr Asn Tyr Asp Tyr Tyr Ile Arg Gly Ala Thr Thr Thr Phe Ser			
165		170	175
Ala Val Glu Arg Asp Arg Gln Trp Lys Phe Ile Met Cys Arg Met Thr			
180		185	190
Glu Tyr Asp Cys Glu Phe Ala Asn Val			
195		200	
<210> 93			
<211> 247			
<212> PRT			
<213> Homo sapiens			
<400> 93			
Met Gly Asn Gly Leu Ser Glu Glu Arg Gly Asn Asn Phe Asn His Ile			
1	5	10	15
Ser Pro Ile Pro Pro Val Pro His Pro Arg Ser Val Ile Gln Gln Ala			
20		25	30
Glu Glu Lys Leu His Thr Pro Gln Lys Arg Leu Met Thr Pro Trp Glu			
35		40	45
Glu Ser Asn Val Met Gln Asp Lys Asp Ala Pro Ser Pro Lys Pro Arg			
50		55	60
Leu Ser Pro Arg Glu Thr Ile Phe Gly Lys Ser Glu His Gln Asn Ser			
65		70	75
Ser Pro Thr Cys Gln Glu Asp Glu Glu Asp Val Arg Tyr Asn Ile Val			
85		90	95
His Ser Leu Pro Pro Asp Ile Asn Asp Thr Glu Pro Val Thr Met Ile			
100		105	110
Phe Met Gly Tyr Gln Gln Ala Glu Asp Ser Glu Glu Asp Lys Lys Phe			
115		120	125
Leu Thr Gly Tyr Asp Gly Ile Ile His Ala Glu Leu Val Val Ile Asp			

130	135	140
Asp Glu Glu Glu Glu Asp Glu Gly Glu Ala Glu Lys Pro Ser Tyr His		
145	150	155
Pro Ile Ala Pro His Ser Gln Val Tyr Gln Pro Ala Lys Pro Thr Pro		
165	170	175
Leu Pro Arg Lys Arg Ser Glu Ala Ser Pro His Glu Asn Thr Asn His		
180	185	190
Lys Ser Pro His Lys Asn Ser Ile Ser Leu Lys Glu Gln Glu Glu Ser		
195	200	205
Leu Gly Ser Pro Val His His Ser Pro Phe Asp Ala Gln Thr Thr Gly		
210	215	220
Asp Gly Thr Glu Asp Pro Ser Leu Thr Ala Leu Arg Met Arg Met Ala		
225	230	235
Lys Leu Gly Lys Lys Val Ile		
245		

<210> 94

<400> 94

000

<210> 95

<211> 188

<212> PRT

<213> Homo sapiens

<400> 95

Met Pro Val Leu Arg Glu Tyr Leu Met Ser Gly	Gly Ile Cys Pro Val		
1	5	10	15

Ser Arg Asp Thr Ile Asp Tyr Leu Leu Ser Lys Asn Gly Ser Gly Asn		
20	25	30

Ala Ile Ile Ile Val Val Gly	Gly Ala Ala Glu Ser Leu Ser Ser Met	
35	40	45

Pro Gly Lys Asn Ala Val Thr Leu Arg Asn Arg Lys Gly Phe Val Lys		
50	55	60

Leu Ala Leu Arg His Gly Ala Asp Leu Val Pro Ile Tyr Ser Phe Gly			
65	70	75	80

Glu Asn Glu Val Tyr Lys Gln Val Ile Phe Glu Glu Gly Ser Trp Gly		
85	90	95

Arg Trp Val Gln Lys Lys Phe Gln Lys Tyr Ile Gly Phe Ala Pro Cys		
100	105	110

Ile Phe His Gly Arg Gly Leu Phe Ser Ser Asp Thr Trp Gly Leu Val

115

120

125

Pro Tyr Ser Lys Pro Ile Thr Thr Val Val Gly Glu Pro Ile Thr Ile  
 130 135 140

Pro Lys Leu Glu His Pro Thr Gln Gln Asp Ile Asp Leu Tyr His Thr  
 145 150 155 160

Met Tyr Met Glu Ala Leu Val Lys Leu Phe Asp Lys His Lys Thr Lys  
 165 170 175

Phe Gly Leu Pro Glu Thr Glu Val Leu Glu Val Asn  
 180 185

&lt;210&gt; 96

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 96

Arg Gly Ala Gly Thr Gln Pro Gly Pro Leu Leu Lys Lys Pro Tyr Gln  
 1 5 10 15

Pro Arg Ile Lys Ile Ser Lys Thr Ser Val Asp Gly Asp Pro His Phe  
 20 25 30

Val Val Asp Phe Pro Leu Ser Arg Leu Thr Val Cys Phe Asn Ile Asp  
 35 40 45

Gly Gln Pro Gly Asp Ile Leu Arg Leu Val Ser Asp His Arg Asp Ser  
 50 55 60

Gly Val Thr Val Asn Gly Glu Leu Ile Gly Ala Pro Ala Pro Pro Asn  
 65 70 75 80

Gly His Lys Lys Gln Arg Thr Tyr Leu Arg Thr Ile Thr Ile Leu Ile  
 85 90 95

Asn Lys Pro Glu Arg Ser Tyr Leu Glu Ile Thr Pro Ser Arg Val Ile  
 100 105 110

Leu Asp Gly Gly Asp Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val  
 115 120 125

Val Gly Ser Trp Gly Leu Glu Val Ser Val Ser Ala Asn Ala Asn Val  
 130 135 140

Thr Val Thr Ile Gln Gly Ser Ile Ala Phe Val Ile Leu Ile His Leu  
 145 150 155 160

Tyr Lys Lys Pro Ala Pro Phe Gln Arg His His Leu Gly Phe Tyr Ile  
 165 170 175

Ala Asn Ser Glu Gly Leu Ser Ser Asn Cys His Gly Leu Leu Gly Gln  
 180 185 190

Phe Leu Asn Gln Asp Ala Arg Leu Thr Glu Asp Pro Ala Gly Pro Ser

195

200

205

Gln Asn Leu Thr His Pro Leu Leu Leu Gln Val Gly Glu Gly Pro Glu  
 210 215 220

Ala Val Leu Thr Val Lys Gly His Gln Val Pro Val Val Trp Lys Gln  
 225 230 235 240

Arg Lys Ile Tyr Asn Gly Glu Glu Gln Ile Asp Cys Trp Phe Ala Arg  
 245 250 255

Asn Asn Ala Ala Lys Leu Ile Asp Gly Glu Tyr Lys Asp Tyr Leu Ala  
 260 265 270

Ser His Pro Phe Asp Thr Gly Met Thr Leu Gly Gln Gly Met Ser Arg  
 275 280 285

Glu Leu  
 290

&lt;210&gt; 97

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 97

Asn Gln Phe Thr Ser Cys Ile Leu Phe Cys Asp Gly Gly His Trp Arg  
 1 5 10 15

Glu Leu Leu Phe Gln Ser Ile Met Ser Ser His Trp Thr Leu Lys Ile  
 20 25 30

Leu Leu Val Pro Leu Phe Tyr Leu Ser Leu Glu Phe Pro Ser Gly Phe  
 35 40 45

Val Leu Cys Leu Ala Asn Asp Leu Gly Tyr His Phe Ser Ser Arg Val  
 50 55 60

Arg Ser  
 65

&lt;210&gt; 98

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 98

Val Pro Gly Ala Leu Pro Leu Ala Val Gly Pro Pro Pro Pro Pro Ser  
 1 5 10 15

Gly Phe Pro Arg Asn Val Gln Pro Arg Arg Pro Ser Gln Ser Leu Gly  
 20 25 30

Arg Val Met Ser Ala Gly Pro Asp Lys Arg Pro Leu Gly Thr Leu Cys  
 35 40 45

Cys Phe Val Ser Phe Leu  
50

<210> 99  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 99  
Phe Phe Leu Tyr Phe Asn Gln Val Phe Tyr Trp Ser Gly Asn Cys Lys  
1 5 10 15

Ile Tyr Lys Phe Leu Lys Gly Ile Ser Cys Leu Lys Ala Ser Ile Ala  
20 25 30

Leu Tyr Pro Arg Ser Leu Ile Gln Thr Asn Thr Gln Asn Thr Glu Lys  
35 40 45

Ser

<210> 100  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 100  
Met Gly Asn Lys Glu Pro Gly Ser His Gly His Arg Ser Asp Ala Asp  
1 5 10 15

Pro Ser Arg Phe Ser Pro Val Leu Pro Pro Ala Val Gln Leu Gly Val  
20 25 30

Trp Arg Glu Glu Gly Arg Gly Ser Cys Pro Phe Ser Trp Gly Arg  
35 40 45

Gly Pro Val Ser Ser Thr Trp Leu Phe Pro Lys Gly Ser Lys Arg Glu  
50 55 60

Gly Leu Gly Glu Lys Thr Met Glu Arg Gly Pro Ala Lys Glu Asn Arg  
65 70 75 80

Glu Glu Val Ser Gly Leu Ile Ser Leu Leu Ser Arg Cys Ser Gly Ser  
85 90 95

Leu Ile

<210> 101  
<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 101  
Met Gly Lys Gly Leu Gly Glu Asp Gly Gln Gln Arg Ala Arg Glu Ser

1

5

10

15

Trp Thr Ser Gln Arg Arg Arg Pro Gln Gln Val Gln Ser Arg Ala Ala  
 20 25 30

Thr Ser Cys Pro Ala Gly Cys Leu Glu Gly Arg Gly Gln Arg Arg Val  
 35 40 45

Met Ser Leu Gln Leu Gly Glu Gly Pro Ser Glu Leu His Val Ala Phe  
 50 55 60

Ser Gln Arg Glu Gln Glu Gly Arg Ile Gly Arg Glu Asn Asn Gly Glu  
 65 70 75 80

Gly Thr Cys Glu Gly Lys Gln Gly Ser Glu Arg Phe Asp Gln Pro  
 85 90 95

Ala Ile Thr Val Phe Trp Leu Ser Tyr Leu Ala Arg Arg Leu Arg Asp  
 100 105 110

Arg Tyr Ile Thr Ser  
 115

&lt;210&gt; 102

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 102

Met Asn Arg Gly Pro Pro Thr Phe Trp Thr Phe Glu Asp Arg Gly Ala  
 1 5 10 15

Lys Arg Asp Arg Ser Ala Arg Gly Pro His Pro Ala Pro Leu Gly Glu  
 20 25 30

Pro Leu Leu Thr Trp Val Ser Leu Arg Leu His Gln Leu Val Gly Leu  
 35 40 45

Gln Ala Ser Pro Pro Asp Ser Pro His Cys Trp Ala Thr Leu Asn Leu  
 50 55 60

Lys Phe His Cys Pro Ala Pro Pro Thr Pro Thr Pro Lys Phe Pro Lys  
 65 70 75 80

Glu Met Ser Lys Thr His Ala His Thr Tyr Ile His Thr Cys Thr Cys  
 85 90 95

Ala His Thr Ser Cys Val Thr Thr Gly Gln Gly Asn Ala Ser Leu Arg  
 100 105 110

Ile Pro Gly Pro Gly Pro Gly Val Lys Gly Cys Ser Gly Thr Leu Pro  
 115 120 125

Pro Asn Leu Leu Glu Asp Pro Glu Cys Gly Arg Ile Gly Cys Leu  
 130 135 140

Pro

145

<210> 103  
<211> 197  
<212> PRT  
<213> Homo sapiens

<400> 103  
Met Arg Thr His Val Leu Cys Tyr His Trp Pro Arg Lys Arg Glu Ser  
1 5 10 15  
Gln Asp Ser Arg Ala Trp Thr Trp Gly Lys Gly Leu Leu Trp Asp Ser  
20 25 30  
Ala Pro Gln Pro Leu Gly Gly Pro Arg Val Trp Gly Gln Asp Trp Val  
35 40 45  
Ser Ala Leu Thr His Arg Ile Ser Pro Gly Pro Lys Ala Glu Lys Lys  
50 55 60  
Ser Gly Arg Arg Ser Arg Arg Gln Gly Trp Trp Thr Lys Val Gly Val  
65 70 75 80  
Arg Leu Lys Ser Gly Ser Glu Thr Arg Phe Asp His Thr His His Pro  
85 90 95  
Ser Val Pro Pro Gly Gln His Ala Pro Leu Glu Pro Leu His Arg Leu  
100 105 110  
Ile Arg Thr Arg Gln Asn Leu Leu Leu Thr Asn Leu Leu Arg Ala Val  
115 120 125  
Tyr Arg Gly Ile Thr Leu Val Gln Glu Gly Cys Pro Ser Cys Phe His  
130 135 140  
Thr Thr Thr Gly Pro Thr Ile Pro Leu Leu Ala Ser Leu Arg Arg Pro  
145 150 155 160  
Arg Asp Pro Gln Lys Pro Gly Glu Lys Glu Ser Trp Pro Leu Val Ser  
165 170 175  
Thr Ala Phe Arg Ala Thr Gly Asp Ala Gln Met Thr Trp Val Lys  
180 185 190  
Gly Leu Ser Gln Thr  
195

<210> 104  
<211> 152  
<212> PRT  
<213> Homo sapiens

<400> 104  
Ser Glu Ala Arg Asn Ala Pro Ser Gly Thr Ala Gln Thr Phe Ala Met  
1 5 10 15

Gly Phe Met Thr Gly Thr Ile Ser Ser Met Tyr Gln Thr Lys Ala Val  
                   20                  25                  30  
  
 Ile Ile Ala Met Ile Ile Thr Ala Val Val Ser Ile Ser Val Thr Ile  
                   35                  40                  45  
  
 Phe Cys Phe Gln Thr Lys Val Asp Phe Thr Ser Cys Thr Gly Leu Phe  
                   50                  55                  60  
  
 Cys Val Leu Gly Ile Val Leu Leu Val Thr Gly Ile Val Thr Ser Ile  
                   65                  70                  75                  80  
  
 Val Leu Tyr Phe Gln Tyr Val Tyr Trp Leu His Met Leu Tyr Ala Ala  
                   85                  90                  95  
  
 Leu Gly Ala Ile Cys Phe Thr Leu Phe Leu Ala Tyr Asp Thr Gln Leu  
                   100                  105                  110  
  
 Val Leu Gly Asn Arg Lys His Thr Ile Ser Pro Glu Asp Tyr Ile Thr  
                   115                  120                  125  
  
 Gly Ala Leu Gln Ile Tyr Thr Asp Ile Ile Tyr Ile Phe Thr Phe Val  
                   130                  135                  140  
  
 Leu Gln Leu Met Gly Asp Arg Asn  
                   145                  150

<210> 105  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 105  
 His Leu Leu Ser Pro Pro His Ile Leu Gly Thr Ala Phe Ser Ser Thr  
       1                  5                  10                  15  
  
 Gly Asn Gly Thr Asp Gly Gln Lys Thr Ser Ile Thr Phe Met Lys Gly  
       20                  25                  30  
  
 Leu Leu Glu Leu Pro Gly Lys Lys Ala Cys Leu Gly Glu Leu Gly Arg  
       35                  40                  45  
  
 Cys Arg Gln Cys Gly Trp Ala Gly Gly Gln Pro Val Val Leu Leu Pro  
       50                  55                  60  
  
 Ala Gln  
       65

<210> 106  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 106  
 Pro Thr Ser Leu Ile Trp Pro Thr Thr Met Phe Cys Ser Val His Val  
       1                  5                  10                  15

Leu Phe Lys Ser Ile Leu Asn Trp Leu Pro Ser Phe Lys Leu Asn Gln  
 20 25 30

Thr Leu Lys Ala Trp Ser Ser His Thr Gly Pro Thr Phe Pro His Gly  
 35 40 45

Asn Tyr Glu Arg Ala Pro Ala Gln Gln Gly Leu Ser Arg Ser Leu Pro  
 50 55 60

Pro Pro Leu Pro Val Pro Gln Ile Trp Pro Leu Leu Arg Lys Ile Arg  
 65 70 75 80

Thr Ala Thr Gly Pro Ser Glu Pro Lys Pro Thr  
 85 90

<210> 107

<211> 41

<212> PRT

<213> Homo sapiens

<400> 107

Leu Leu Pro Ser Phe Phe Leu His Phe Ser Leu Ser Ile Tyr Phe Pro  
 1 5 10 15

His Pro Thr Phe Leu Glu Gln Pro Leu Val Leu Gln Glu Met Ala Leu  
 20 25 30

Met Asp Arg Arg Leu Ala Leu Pro Ser  
 35 40

<210> 108

<211> 471

<212> PRT

<213> Homo sapiens

<400> 108

Asn Glu Leu Lys Ala Ser Gly Gly Glu Ile Lys Ile His Lys Met Glu  
 1 5 10 15

Gln Lys Glu Asn Val Pro Pro Gly Pro Glu Val Cys Ile Thr His Gln  
 20 25 30

Glu Gly Glu Lys Ile Ser Ala Asn Glu Asn Ser Leu Ala Val Arg Ser  
 35 40 45

Thr Pro Ala Glu Asp Asp Ser Arg Asp Ser Gln Val Lys Ser Glu Val  
 50 55 60

Gln Gln Pro Val His Pro Lys Pro Leu Ser Pro Asp Ser Arg Ala Ser  
 65 70 75 80

Ser Leu Ser Glu Ser Ser Pro Pro Lys Ala Met Lys Lys Phe Gln Ala  
 85 90 95

Pro Ala Arg Glu Thr Cys Val Glu Cys Gln Lys Thr Val Tyr Pro Met

100	105	110
Glu Arg Leu Leu Ala Asn Gln Gln Val Phe His Ile Ser Cys Phe Arg		
115	120	125
Cys Ser Tyr Cys Asn Asn Lys Leu Ser Leu Gly Thr Tyr Ala Ser Leu		
130	135	140
His Gly Arg Ile Tyr Cys Lys Pro His Phe Asn Gln Leu Phe Lys Ser		
145	150	155
Lys Gly Asn Tyr Asp Glu Gly Phe Gly His Arg Pro His Lys Asp Leu		
165	170	175
Trp Ala Ser Lys Asn Glu Asn Glu Glu Ile Leu Glu Arg Pro Ala Gln		
180	185	190
Leu Ala Asn Ala Arg Glu Thr Pro His Ser Pro Gly Val Glu Asp Ala		
195	200	205
Pro Ile Ala Lys Gly Gly Val Leu Ala Ala Ser Met Glu Ala Lys Ala		
210	215	220
Ser Ser Gln Gln Glu Lys Glu Asp Lys Pro Ala Glu Thr Lys Lys Leu		
225	230	235
240		
Arg Ile Ala Trp Pro Pro Pro Thr Glu Leu Gly Ser Ser Gly Ser Ala		
245	250	255
Leu Glu Glu Gly Ile Lys Met Ser Lys Pro Lys Trp Pro Pro Glu Asp		
260	265	270
Glu Ile Ser Lys Pro Glu Val Pro Glu Asp Val Asp Leu Asp Leu Lys		
275	280	285
Lys Leu Arg Arg Ser Ser Leu Lys Glu Arg Ser Arg Pro Phe Thr		
290	295	300
Val Ala Ala Ser Phe Gln Ser Thr Ser Val Lys Ser Pro Lys Thr Val		
305	310	315
320		
Ser Pro Pro Ile Arg Lys Gly Trp Ser Met Ser Glu Gln Ser Glu Glu		
325	330	335
Ser Val Gly Gly Arg Val Ala Glu Arg Lys Gln Val Glu Asn Ala Lys		
340	345	350
Ala Ser Lys Lys Asn Gly Asn Val Gly Lys Thr Thr Trp Gln Asn Lys		
355	360	365
Glu Ser Lys Gly Glu Thr Gly Lys Arg Ser Lys Glu Gly His Ser Leu		
370	375	380
Glu Met Glu Asn Glu Asn Leu Val Glu Asn Gly Ala Asp Ser Asp Glu		
385	390	395
400		
Asp Asp Asn Ser Phe Leu Lys Gln Gln Ser Pro Gln Glu Pro Lys Ser		
405	410	415

Leu Asn Trp Ser Ser Phe Val Asp Asn Thr Phe Ala Glu Glu Phe Thr  
420 425 430

Thr Gln Asn Gln Lys Ser Gln Asp Val Glu Leu Trp Glu Gly Glu Val  
435 440 445

Val Lys Glu Leu Ser Val Glu Glu Gln Ile Lys Arg Asn Arg Tyr Tyr  
450 455 460

Asp Glu Asp Glu Asp Glu Glu  
465 470

<210> 109

<400> 109  
000

<210> 110

<400> 110  
000

<210> 111

<400> 111  
000

<210> 112

<211> 94

<212> PRT

<213> Homo sapiens

<400> 112

Arg Lys Met Leu Arg Ala Ala Leu Pro Ala Leu Pro Ile Pro Arg Cys  
1 5 10 15

Lys Tyr Thr Leu Phe Leu Ile Ala His Met Gly Pro Pro Tyr Leu Leu  
20 25 30

Ala Leu Val Leu Met Leu Lys Ser Trp Pro Trp Glu Arg Cys Leu Pro  
35 40 45

Gly Arg His Ser Cys Leu Val Gln Ala Lys Pro Leu Cys Asn Ala Ser  
50 55 60

Pro Phe Trp Cys Tyr Glu Val Pro Leu Cys Arg Arg Phe His Gln Gln  
65 70 75 80

Leu Val Thr Val Pro Ser Thr Arg Thr Cys Phe Glu Ile Ser  
85 90

<210> 113

<211> 324  
<212> PRT  
<213> Homo sapiens

<400> 113  
Gly Leu Ser Thr Phe Gln Asn Trp Leu Pro Ser Thr Pro Ala Thr Ser  
1 5 10 15  
Trp Gly Gly Leu Thr Ser Ser Arg Thr Thr Asp Asn Gly Gly Glu Gln  
20 25 30  
Thr Ala Leu Ser Pro Gln Glu Ala Pro Phe Ser Gly Ile Ser Thr Pro  
35 40 45  
Pro Asp Val Leu Ser Val Gly Pro Glu Pro Ala Trp Glu Ala Ala Ala  
50 55 60  
Thr Thr Lys Gly Leu Ala Thr Asp Val Ala Thr Phe Thr Gln Gly Ala  
65 70 75 80  
Ala Pro Gly Arg Glu Asp Thr Gly Leu Leu Thr Thr Thr His Gly Pro  
85 90 95  
Glu Glu Ala Pro Arg Leu Ala Met Leu Gln Asn Glu Leu Glu Gly Leu  
100 105 110  
Gly Asp Ile Phe His Pro Met Asn Ala Glu Glu Gln Ala Gln Leu Ala  
115 120 125  
Ala Ser Gln Pro Gly Pro Lys Val Leu Ser Ala Glu Gln Gly Ser Tyr  
130 135 140  
Phe Val Arg Leu Gly Asp Leu Gly Pro Ser Phe Arg Gln Arg Ala Phe  
145 150 155 160  
Glu His Ala Val Ser His Leu Gln His Gly Gln Phe Gln Ala Arg Asp  
165 170 175  
Thr Leu Ala Gln Leu Gln Asp Cys Phe Arg Leu Ile Glu Lys Ala Gln  
180 185 190  
Gln Ala Pro Glu Gly Gln Pro Arg Leu Asp Gln Gly Ser Gly Ala Ser  
195 200 205  
Ala Glu Asp Ala Ala Val Gln Glu Glu Arg Asp Ala Gly Val Leu Ser  
210 215 220  
Arg Val Cys Gly Leu Leu Arg Gln Leu His Thr Ala Tyr Ser Gly Leu  
225 230 235 240  
Val Ser Ser Leu Gln Gly Leu Pro Ala Glu Leu Gln Gln Pro Val Gly  
245 250 255  
Arg Ala Arg His Ser Leu Cys Glu Leu Tyr Gly Ile Val Ala Ser Ala  
260 265 270  
Gly Ser Val Glu Glu Leu Pro Ala Glu Arg Leu Val Gln Ser Arg Glu  
275 280 285

Gly Val His Gln Ala Trp Gln Gly Leu Glu Gln Leu Leu Glu Gly Leu  
290 295 300

Gln His Asn Pro Pro Leu Ser Trp Leu Val Gly Pro Phe Ala Leu Pro  
305 310 315 320

Ala Gly Gly Gln

<210> 114  
<211> 148  
<212> PRT  
<213> *Homo sapiens*

<400> 114  
Ile Ala Met Thr Pro Pro Asn Ala Thr Glu Ala Ser Lys Pro Gln Gly  
1 5 10 15

Thr Thr Val Cys Pro Pro Cys Asp Asn Glu Leu Lys Ser Glu Ala Ile  
                  20               25               30

Ile Glu His Leu Cys Ala Ser Glu Phe Ala Leu Arg Met Lys Ile Lys  
35 40 45

Glu Val Lys Lys Glu Asn Gly Asp Lys Lys Ile Val Pro Lys Lys Lys  
 50 55 60

Lys Pro Leu Lys Leu Gly Pro Ile Lys Lys Lys Asp Leu Lys Lys Leu  
65 70 75 80

Val Leu Tyr Leu Lys Asn Gly Ala Asp Cys Pro Cys His Gln Leu Asp  
85 90 95

Asn	Leu	Ser	His	His	Phe	Leu	Ile	Met	Gly	Arg	Lys	Val	Lys	Ser	Gln
	100							105						110	

Tyr Leu Leu Thr Ala Ile His Lys Trp Asp Lys Lys Asn Lys Glu Phe  
115 120 125

Lys Asn Phe Met Lys Lys Met Lys Asn His Glu Cys Pro Thr Phe Gln  
 130 135 140

Ser Val Phe Lys  
145

<210> 115  
<211> 45  
<212> PRT  
<213> *Homo sapiens*

<400> 115  
Pro Val Ile Tyr Ser Val Leu Ile Arg Ser Glu Ile Arg Tyr Lys Ile  
1 5 10 15

Ser Arg Pro Val Thr Thr Asp Phe Ile Lys Ser Glu Ser Leu Ile Leu

20

25

30

Ala Cys Leu Tyr Leu Ile Ser Glu Arg Met Ser Thr Leu  
35 40 45

<210> 116  
<211> 40  
<212> PRT  
<213> Homo sapiens

<400> 116  
Pro Asp Cys Glu Ser Phe Met Tyr Phe Asn Leu Asp Ser Val Phe Leu  
1 5 10 15

Arg Val Leu Ser Met Lys Leu Ala Asp Ser Arg Gln Asp Ser Phe Phe  
20 25 30

His His Gly Trp Leu Ile Ser Pro  
35 40

<210> 117  
<211> 27  
<212> PRT  
<213> Homo sapiens

<400> 117  
Thr Asn Glu His Thr Leu Thr Ser Tyr Leu Gln Leu Pro Phe Ser Phe  
1 5 10 15

Asn Arg Ile Val Lys Ala Ser Cys Ile Leu Ile  
20 25

<210> 118

<400> 118  
000

<210> 119  
<211> 135  
<212> PRT  
<213> Homo sapiens

<400> 119  
Arg Ser Asn Ala Val Gln Leu Thr Arg Met Glu Tyr Ala Met Lys Ser  
1 5 10 15

Leu Ser Leu Leu Tyr Pro Lys Ser Leu Ser Arg His Val Ser Val Arg  
20 25 30

Thr Ser Val Val Thr Gln Gln Leu Leu Ser Glu Pro Ser Pro Lys Ala  
35 40 45

Pro Arg Ala Arg Pro Cys Arg Val Ser Thr Ala Asp Arg Ser Val Arg  
50 55 60

Lys Gly Ile Met Ala Tyr Ser Leu Glu Asp Leu Leu Leu Lys Val Arg  
 65 70 75 80

Asp Thr Leu Met Leu Ala Asp Lys Pro Phe Phe Leu Val Leu Glu Glu  
 85 90 95

Asp Gly Thr Thr Val Glu Thr Glu Tyr Phe Gln Ala Leu Ala Gly  
 100 105 110

Asp Thr Val Phe Met Val Leu Gln Lys Gly Gln Lys Trp Gln Pro Pro  
 115 120 125

Ser Glu Gln Gly Thr Arg His  
 130 135

<210> 120

<400> 120  
000

<210> 121

<400> 121  
000

<210> 122  
<211> 193  
<212> PRT  
<213> Homo sapiens

<400> 122  
 Glu Ala Cys Ala His Thr Leu Ser Cys Pro Ala Leu Ala Arg Leu Gly  
 1 5 10 15

Arg Ala Arg Arg Arg Pro Trp Met Ser His Arg Thr Ser Ser Thr Phe  
 20 25 30

Arg Ala Glu Arg Ser Phe His Ser Ser Ser Ser Ser Ala Ala  
 35 40 45

Thr Ser Ser Ser Ala Ser Arg Ala Leu Pro Ala Gln Asp Pro Pro Met  
 50 55 60

Glu Lys Ala Leu Ser Met Phe Ser Asp Asp Phe Gly Ser Phe Met Arg  
 65 70 75 80

Pro His Ser Glu Pro Leu Ala Phe Pro Ala Arg Pro Gly Gly Ala Gly  
 85 90 95

Asn Ile Lys Thr Leu Gly Asp Ala Tyr Glu Phe Ala Val Asp Val Arg  
 100 105 110

Asp Phe Ser Pro Glu Asp Ile Ile Val Thr Thr Ser Asn Asn His Ile  
 115 120 125

Glu Val Arg Ala Glu Lys Leu Ala Ala Asp Gly Thr Val Met Asn Thr  
 130 135 140

Phe Ala His Lys Cys Gln Leu Pro Glu Asp Val Asp Pro Thr Ser Val  
 145 150 155 160

Thr Ser Ala Leu Arg Glu Asp Gly Ser Leu Thr Ile Arg Ala Arg Arg  
 165 170 175

His Pro His Thr Glu His Val Gln Gln Thr Phe Arg Thr Glu Ile Lys  
 180 185 190

Ile

<210> 123

<400> 123  
000

<210> 124  
<211> 38  
<212> PRT  
<213> Homo sapiens

<400> 124  
Met Ala Thr Phe Tyr Pro Leu Phe Pro Asn Gly Gly Gly Thr Tyr Pro  
 1 5 10 15

Glu Val Val Asn Asp Phe Pro Leu Lys Leu Leu Tyr Phe Thr Asn Leu  
 20 25 30

Asn Tyr Phe Val Leu Met  
 35

<210> 125  
<211> 65  
<212> PRT  
<213> Homo sapiens

<400> 125  
Met Trp Leu Phe His Asp Ala Gly Ile Arg Ser Ala Gly Gly Leu Ser  
 1 5 10 15

Leu Leu Ser Cys Gly Ser Trp Pro Leu Pro Ser Gly Tyr His Arg Leu  
 20 25 30

Gln Asp Thr Asn Gly Gln Gln Lys Asn Val Thr Leu Leu Ile Leu Ser  
 35 40 45

Ser Ser Ser Ile Gly Thr Lys Leu Pro Ser Arg Pro Arg Glu Ile Leu  
 50 55 60

Cys

65

&lt;210&gt; 126

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 126

Glu	Thr	Arg	Val	Lys	Thr	Ser	Leu	Glu	Leu	Leu	Arg	Thr	Gln	Leu	Glu
1				5					10			15			

Pro	Thr	Gly	Thr	Val	Gly	Asn	Thr	Ile	Met	Thr	Ser	Gln	Pro	Val	Pro
						20			25					30	

Asn	Glu	Thr	Ile	Ile	Val	Leu	Pro	Ser	Asn	Val	Ile	Asn	Phe	Ser	Gln
							35		40			45			

Ala	Glu	Lys	Pro	Glu	Pro	Thr	Asn	Gln	Gly	Gln	Asp	Ser	Leu	Lys	Lys
						50		55			60				

His	Leu	His	Ala	Glu	Ile	Lys	Val	Ile	Gly	Thr	Ile	Gln	Ile	Leu	Cys
65					70				75				80		

Gly	Met	Met	Val	Leu	Ser	Leu	Gly	Ile	Ile	Leu	Ala	Ser	Ala	Ser	Phe
							85		90			95			

Ser	Pro	Asn	Phe	Thr	Gln	Val	Thr	Ser	Thr	Leu	Leu	Asn	Ser	Ala	Tyr
						100		105				110			

Pro	Phe	Ile	Gly	Pro	Phe	Phe	Phe	Ile	Ile	Ser	Gly	Ser	Leu	Ser	Ile
						115		120			125				

Ala	Thr	Glu	Lys	Arg	Leu	Thr	Lys	Leu	Leu	Val	His	Ser	Ser	Leu	Val
						130		135			140				

Gly	Ser	Ile	Leu	Ser	Ala	Leu	Ser	Ala	Leu	Val	Gly	Phe	Ile	Ile	Leu
145						150				155			160		

Ser	Val	Lys	Gln	Ala	Thr	Leu	Asn	Pro	Ala	Ser	Leu	Gln	Cys	Glu	Leu
						165			170			175			

Asp	Lys	Asn	Asn	Ile	Pro	Thr	Arg	Ser	Tyr	Val	Ser	Tyr	Phe	Tyr	His
						180		185			190				

Asp	Ser	Leu	Tyr	Thr	Thr	Asp	Cys	Tyr	Thr	Ala	Lys	Ala	Ser	Leu	Ala
						195		200			205				

Gly	Thr	Leu	Ser	Leu	Met	Leu	Ile	Cys	Thr	Leu	Leu	Glu	Phe	Cys	Leu
					210			215			220				

Ala	Val	Leu	Thr	Ala	Val	Leu	Arg	Trp	Lys	Gln	Ala	Tyr	Ser	Asp	Phe
225						230				235		240			

Pro	Gly	Val	Ser	Val	Leu	Ala	Gly	Phe	Thr						
						245		250							

<210> 127

<400> 127  
000

<210> 128  
<211> 61  
<212> PRT  
<213> *Homo sapiens*

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<400> 128
Met His Thr Cys Gln Ile Tyr Ile Tyr Ser Thr Asn Val Thr Phe Leu
      1           5           10          15

Phe Phe Val Leu Asp Val Arg Ala Cys Ser Tyr Val Arg Tyr Leu His
      20          25          30

Lys Leu Leu His Tyr Phe Phe Leu Cys Asn Thr Phe Leu Phe Val Tyr
      35          40          45

Val Val Gln Ile Tyr Ser Phe Leu Lys Leu Leu Lys Lys
      50          55          60

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<210> 129  
<211> 211  
<212> PRT  
<213> Homo sapiens
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<400> 129  
 Pro Ala Ser Asn Arg Pro Lys Ser Gly Arg Ala Pro Glu Pro Arg Glu  
     1              5                 10                 15  
  
 Pro Ala Arg Arg Ser Ala Gly Gly Ser Pro Pro Pro Pro Pro Trp Pro  
     20                 25                 30  
  
 Arg Val Pro Ala Ala Ala Gly Thr Glu Gly Ala Ser Pro Asp Leu  
     35                 40                 45  
  
 Ala Pro Leu Arg Pro Ala Ala Pro Gly Gln Thr Pro Leu Arg Lys Glu  
     50                 55                 60  
  
 Val Leu Lys Ser Lys Met Gly Lys Ser Glu Lys Ile Ala Leu Pro His  
     65                 70                 75                 80  
  
 Gly Gln Leu Val His Gly Ile His Leu Tyr Glu Gln Pro Lys Ile Asn  
     85                 90                 95  
  
 Arg Gln Lys Ser Lys Tyr Asn Leu Pro Leu Thr Lys Ile Thr Ser Ala  
    100                 105                 110  
  
 Lys Arg Asn Glu Asn Asn Phe Trp Gln Asp Ser Val Ser Ser Asp Arg  
    115                 120                 125  
  
 Ile Gln Lys Gln Glu Lys Lys Pro Phe Lys Asn Thr Glu Asn Ile Lys  
    130                 135                 140

Asn Ser His Leu Lys Lys Ser Ala Phe Leu Thr Glu Val Ser Gln Lys  
 145 150 155 160

Glu Asn Tyr Ala Gly Ala Lys Phe Ser Asp Pro Pro Ser Pro Val  
 165 170 175

Leu Pro Lys Pro Pro Ser His Trp Met Gly Ser Thr Val Glu Asn Ser  
 180 185 190

Asn Gln Asn Arg Glu Leu Met Ala Val His Leu Lys Thr Leu Leu Lys  
 195 200 205

Val Gln Thr  
 210

<210> 130

<400> 130  
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<210> 131  
<211> 48  
<212> PRT  
<213> Homo sapiens

<400> 131  
Met Ile Leu Thr Asn Pro Leu Lys Ser Lys Thr Asp Thr Phe Ile Asn  
 1 5 10 15

Arg Ser Ile Cys Lys Gln Ser Gln Tyr Ala Leu Gly Arg Leu Thr Ile  
 20 25 30

Phe Leu Thr Cys Gln Gly Val Leu Pro Ser Gln Gln Thr Pro Leu Ile  
 35 40 45

<210> 132  
<211> 78  
<212> PRT  
<213> Homo sapiens

<400> 132  
Leu Gly Ile Phe Leu His Gln Tyr Val Ile Phe Asn Gln Asn Val Lys  
 1 5 10 15

Phe Leu Leu Asn Ser Leu Pro Ala Ile Val Ile Val Pro Ser Trp Pro  
 20 25 30

Thr Trp Phe Pro Asp Val Val Asn Asn Ile Asn Ala Ser Ala Val Gly  
 35 40 45

Pro Leu Leu Arg Cys Leu Arg Arg Asn Phe Val Leu Ala Ile Ser Ile  
 50 55 60

Asn Phe Val Phe Tyr Leu Gln Phe Gly Arg Arg Lys Val Thr  
 65 70 75

&lt;210&gt; 133

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 133

Met	Asp	Met	Ala	Lys	Thr	Lys	Phe	Leu	Arg	Arg	His	Leu	Ser	Lys	Gly
1															

Pro	Thr	Ala	Asp	Ala	Leu	Met	Leu	Phe	Thr	Thr	Ser	Gly	Asn	Gln	Val
20															30

Gly	His	Asp	Gly	Thr	Ile	Thr	Met	Ala	Gly	Asn	Glu	Phe	Asn	Lys	Asn
35															45

Phe	Thr	Phe	Trp	Leu	Lys	Ile	Thr	Tyr	Trp	Cys	Lys	Lys	Ile	Pro	Asn
50															60

Gln	Ile	Lys	Ser	Tyr	Cys	Phe	Asp
65							70

&lt;210&gt; 134

&lt;400&gt; 134

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&lt;210&gt; 135

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 135

Leu	Asn	Val	Phe	Ser	Ser	Leu	Gln	Ile	Ser	Glu	Leu	Ile	Phe	Pro	Pro
1															

Leu	Pro	Met	Trp	His	Pro	Leu	Pro	Arg	Lys	Lys	Pro	Gly	Met	Tyr	Arg
20															30

Gly	Asn	Gly	His	Gln	Asn	His	Tyr	Pro	Pro	Pro	Val	Pro	Phe	Gly	Tyr
35															45

Pro	Asn	Gln	Gly	Arg	Lys	Asn	Lys	Pro	Tyr	Arg	Pro	Ile	Pro	Val	Thr
50															60

Trp	Val	Pro	Pro	Pro	Gly	Met	His	Cys	Asp	Arg	Asn	His	Trp	Ile	Asn
65															80

Pro	His	Met	Leu	Ala	Pro	His
85						

&lt;210&gt; 136

&lt;400&gt; 136

000

<210> 137  
<211> 83  
<212> PRT  
<213> Homo sapiens

<400> 137

Met	Tyr	Gly	Asn	Ile	Leu	Cys	Pro	Thr	Leu	His	Thr	Pro	Cys	Thr	Gln
1				5					10				15		

Ile Leu Tyr Cys Met Asn Tyr Ala Leu Ser Arg Ile Gln Cys Gln Gly

20				25						30					
----	--	--	--	----	--	--	--	--	--	----	--	--	--	--	--

Glu Leu Gly Glu Ile Asn Tyr Phe Asn Phe Phe Ile Leu Tyr Lys

35				40					45						
----	--	--	--	----	--	--	--	--	----	--	--	--	--	--	--

Ala Met Asp Phe Ile Trp Leu Met Cys Ala Leu Tyr Thr Ser His Phe

50				55					60						
----	--	--	--	----	--	--	--	--	----	--	--	--	--	--	--

Asn Arg Met Glu Leu Leu Ile Ile Phe Gln Arg Val Ile Asp Met Gln

65				70					75				80		
----	--	--	--	----	--	--	--	--	----	--	--	--	----	--	--

Lys Phe Gln

<210> 138  
<211> 366  
<212> PRT  
<213> Homo sapiens

<400> 138

Arg	Pro	Lys	Pro	Gly	His	Pro	Leu	Tyr	Ser	Lys	Tyr	Met	Arg	Gly	Asp
1							5			10			15		

Val Leu Val Met Leu Lys Gln Thr Glu Asn Asn Tyr Leu Glu Cys Gln

20				25						30					
----	--	--	--	----	--	--	--	--	--	----	--	--	--	--	--

Lys Gly Glu Asp Thr Gly Arg Val His Leu Ser Gln Met Lys Ile Ile

35				40					45						
----	--	--	--	----	--	--	--	--	----	--	--	--	--	--	--

Thr Pro Leu Asp Glu His Leu Arg Ser Arg Pro Asn Asp Pro Ser His

50				55					60						
----	--	--	--	----	--	--	--	--	----	--	--	--	--	--	--

Ala Gln Lys Pro Val Asp Ser Gly Ala Pro His Ala Val Val Leu His

65				70					75				80		
----	--	--	--	----	--	--	--	--	----	--	--	--	----	--	--

Asp Phe Pro Ala Glu Gln Val Asp Asp Leu Asn Leu Thr Ser Gly Glu

85				90					95						
----	--	--	--	----	--	--	--	--	----	--	--	--	--	--	--

Ile Val Tyr Leu Leu Glu Lys Ile Asp Thr Asp Trp Tyr Arg Gly Asn

100				105					110						
-----	--	--	--	-----	--	--	--	--	-----	--	--	--	--	--	--

Cys Arg Asn Gln Ile Gly Ile Phe Pro Ala Asn Tyr Val Lys Val Ile

115				120					125						
-----	--	--	--	-----	--	--	--	--	-----	--	--	--	--	--	--

Ile Asp Ile Pro Glu Gly Gly Asn Gly Lys Arg Glu Cys Val Ser Ser  
 130 135 140

His Cys Val Lys Gly Ser Arg Cys Val Ala Arg Phe Glu Tyr Ile Gly  
 145 150 155 160

Glu Gln Lys Asp Glu Leu Ser Phe Ser Glu Gly Glu Ile Ile Ile Leu  
 165 170 175

Lys Glu Tyr Val Asn Glu Glu Trp Ala Arg Gly Glu Val Arg Gly Arg  
 180 185 190

Thr Gly Ile Phe Pro Leu Asn Phe Val Glu Pro Val Glu Asp Tyr Pro  
 195 200 205

Thr Ser Gly Ala Asn Val Leu Ser Thr Lys Val Pro Leu Lys Thr Lys  
 210 215 220

Lys Glu Asp Ser Gly Ser Asn Ser Gln Val Asn Ser Leu Pro Ala Glu  
 225 230 235 240

Trp Cys Glu Ala Leu His Ser Phe Thr Ala Glu Thr Ser Asp Asp Leu  
 245 250 255

Ser Phe Lys Arg Gly Asp Arg Ile Gln Ile Leu Glu Arg Leu Asp Ser  
 260 265 270

Asp Trp Cys Arg Gly Arg Leu Gln Asp Arg Glu Gly Ile Phe Pro Ala  
 275 280 285

Val Phe Val Arg Pro Cys Pro Ala Glu Ala Lys Ser Met Leu Ala Ile  
 290 295 300

Val Pro Lys Gly Arg Lys Ala Lys Ala Leu Tyr Asp Phe Arg Gly Glu  
 305 310 315 320

Asn Glu Asp Glu Leu Ser Phe Lys Ala Gly Asp Ile Ile Thr Glu Leu  
 325 330 335

Glu Ser Val Asp Asp Asp Trp Met Ser Gly Glu Leu Met Gly Lys Ser  
 340 345 350

Gly Ile Phe Pro Lys Asn Tyr Ile Gln Phe Leu Gln Ile Ser  
 355 360 365

<210> 139  
<211> 68  
<212> PRT  
<213> Homo sapiens

<400> 139  
Met Asn Pro Tyr Ile Ser Ile Ile Val Phe Ile Val Phe Leu Cys Ser  
 1 5 10 15

Glu Asn Tyr Pro Trp Asn Asn Met Leu Arg Ile Thr Gly Ser Ser Pro  
 20 25 30

Tyr Leu His Phe Leu Ser Val Leu Gly Val Leu Val Asn Ser Tyr Val  
35 40 45

Leu Ile Leu Phe Asn Ser Glu Phe Leu Thr Gln His Phe Arg Glu Arg  
50 55 60

Ile Gln Ala Gly  
65

<210> 140  
<211> 28  
<212> PRT  
<213> Homo sapiens

<400> 140  
Phe Phe Phe Phe Phe Leu Leu Leu Lys Phe Phe Phe Asn Lys Asp  
1 5 10 15

Lys Gly Phe Asn Asn Phe Cys Ala Thr Ile Leu Asn  
20 25

<210> 141  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 141  
Glu Gly Thr Thr Arg Lys Lys Asp Lys Tyr Ile Leu Ser Leu Glu Asn  
1 5 10 15

Ala Ser Arg Gln Lys Tyr  
20

<210> 142  
<211> 46  
<212> PRT  
<213> Homo sapiens

<400> 142  
Met Pro Phe Leu Arg Lys Phe Asp Arg Leu Val Arg Thr Ser Asp His  
1 5 10 15

Gln Ile Ser Leu Lys Trp Val Ser Trp Asn Phe Ile Phe Asp Asn Ile  
20 25 30

Tyr Thr Ile Pro Asn Ser Phe Ala Val Leu Arg Phe Val Gly  
35 40 45

<210> 143  
<211> 56  
<212> PRT  
<213> Homo sapiens

<400> 143

Met Glu Gly Trp Gly Met Ser Ser Ile Asn Pro Tyr Gly Met His Ser  
 1 5 10 15

Gln Trp Pro Ser His Leu Gly Leu Glu Pro Leu Val Gln Gly Leu Gly  
 20 25 30

Glu Asn Arg Pro His Gly Asn Ser His Thr Val Ile Ala Phe Asn Thr  
 35 40 45

Glu Pro Arg Val Pro Lys Gln Gln  
 50 55

<210> 144

<211> 56

<212> PRT

<213> Homo sapiens

<400> 144

Met Asn Ile Ser Thr Gln Gly Arg Ala Lys Gly Val Pro Arg Ile Leu  
 1 5 10 15

Leu Ala Lys Gly Gln Val Leu Ile Glu Gly Leu Glu Leu Ser Arg Phe  
 20 25 30

Met Glu Ala Ala Cys Thr Leu Gly Ala Cys Pro Asp Ser Ser Leu Gly  
 35 40 45

Phe Pro Phe Tyr Leu Ser Ser Phe  
 50 55

<210> 145

<211> 109

<212> PRT

<213> Homo sapiens

<400> 145

Met Pro Lys Gly Lys Ala Phe Arg Arg Thr Leu Arg Ile Thr Ser Leu  
 1 5 10 15

Phe Phe Ser Ser Leu Leu Leu Gln Leu Leu Phe Gly His His Leu  
 20 25 30

Leu Val Leu Val Ser Pro Gln Leu Pro Gly Ala Val Phe Glu Gly Glu  
 35 40 45

Ala Phe Ser Val Pro Pro Gln Ala Leu Pro Met Met Ala Pro Ser  
 50 55 60

His His Pro Ser Pro Ala Pro Leu Pro Ala Ser Pro Pro Pro Pro Ala  
 65 70 75 80

Pro Pro Pro Pro Trp Arg Arg Gly Ile Pro Leu Ala Phe Gly Leu  
 85 90 95

Pro Arg Ser Arg Arg Leu Pro Glu Leu Pro Gln Pro Arg  
 100 105

&lt;210&gt; 146

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 146

Arg	Pro	Ala	Pro	Ala	Pro	Arg	Cys	Gln	Leu	Pro	Gln	Arg	Pro	Ala	Glu
1															15

Ala	Arg	Cys	Met	Leu	Ser	Arg	Cys	Arg	Ser	Arg	Leu	Leu	His	Val	Leu
															30
20								25							

Gly	Leu	Ser	Phe	Leu	Leu	Gln	Thr	Arg	Arg	Pro	Ile	Leu	Leu	Cys	Ser
															45
35								40							

Pro	Arg	Leu	Met	Lys	Pro	Leu	Val	Val	Phe	Val	Leu	Gly	Gly	Pro	Gly
															60
50								55							

Ala	Gly	Lys	Gly	Thr	Gln	Cys	Ala	Arg	Ile	Val	Glu	Lys	Tyr	Gly	Tyr
															80
65								70			75				

Thr	His	Leu	Ser	Ala	Gly	Glu	Leu	Leu	Arg	Asp	Glu	Arg	Lys	Asn	Pro
															95
85								90							

Asp	Ser	Gln	Tyr	Gly	Glu	Leu	Ile	Glu	Lys	Tyr	Ile	Lys	Glu	Gly	Lys
															110
100								105							

Ile	Val	Pro	Val	Glu	Ile	Thr	Ile	Ser	Leu	Leu	Lys	Arg	Glu	Met	Asp
															125
115								120							

Gln	Thr	Met	Ala	Ala	Asn	Ala	Gln	Lys	Asn	Lys	Phe	Leu	Ile	Asp	Gly
															140
130								135							

Phe	Pro	Arg	Asn	Gln	Asp	Asn	Leu	Gln	Gly	Trp	Asn	Lys	Thr	Met	Asp
															160
145								150			155				

Gly	Lys	Ala	Asp	Val	Ser	Phe	Val	Leu	Phe	Phe	Asp	Cys	Asn	Asn	Glu
															175
165								170							

Ile	Cys	Ile	Glu	Arg	Cys	Leu	Glu	Arg	Gly	Lys	Ser	Ser	Gly	Arg	Ser
															190
180								185							

Asp	Asp	Asn	Arg	Glu	Ser	Leu	Glu	Lys	Arg	Ile	Gln	Thr	Tyr	Leu	Gln
															205
195								200							

Ser	Thr	Lys	Pro	Ile	Ile	Asp	Leu	Tyr	Glu	Met	Gly	Lys	Val	Lys
210								215			220			

Lys	Ile	Asp	Ala	Ser	Lys	Ser	Val	Asp	Glu	Val	Phe	Asp	Glu	Val	Val
															240
225								230			235				

Gln	Ile	Phe	Asp	Lys	Glu	Gly									
															245

&lt;210&gt; 147

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 147

Ile	Pro	Asn	Met	Ala	Ala	Pro	Leu	Gly	Gly	Met	Phe	Ser	Gly	Gln	Pro
1				5				10						15	

Pro	Gly	Pro	Pro	Gln	Ala	Pro	Pro	Gly	Leu	Pro	Gly	Gln	Ala	Ser	Leu
					20			25					30		

Leu	Gln	Ala	Ala	Pro	Gly	Ala	Pro	Arg	Pro	Ser	Ser	Ser	Thr	Leu	Val
					35			40				45			

Asp	Glu	Leu	Glu	Ser	Ser	Phe	Glu	Ala	Cys	Phe	Ala	Ser	Leu	Val	Ser
					50		55				60				

Gln	Asp	Tyr	Val	Asn	Gly	Thr	Asp	Gln	Glu	Glu	Ile	Arg	Thr	Gly	Val
					65		70		75			80			

Asp	Gln	Cys	Ile	Gln	Lys	Phe	Leu	Asp	Ile	Ala	Arg	Gln	Thr	Glu	Cys
					85			90			95				

Phe	Phe	Leu	Gln	Lys	Arg	Leu	Gln	Leu	Ser	Val	Gln	Lys	Pro	Glu	Gln
					100			105				110			

Val	Ile	Lys	Glu	Asp	Val	Ser	Glu	Leu	Arg	Asn	Glu	Leu	Gln	Arg	Lys
					115			120			125				

Asp	Ala	Leu	Val	Gln	Lys	His	Leu	Thr	Lys	Leu	Arg	His	Trp	Gln	Gln
					130		135			140					

Val	Leu	Glu	Asp	Ile	Asn	Val	Gln	His	Lys	Lys	Pro	Ala	Asp	Ile	Pro
					145		150		155			160			

Gln	Gly	Ser	Leu	Ala	Tyr	Leu	Glu	Gln	Ala	Ser	Ala	Asn	Ile	Pro	Ala
					165			170			175				

Pro	Leu	Lys	Pro	Thr
			180	

&lt;210&gt; 148

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 148

Met	Leu	Arg	Asp	Leu	Gln	Leu	Gln	Ile	Leu	Arg	Asn	Val	Thr	His	His
1				5				10				15			

Val	Ser	Val	Thr	Lys	Gln	Leu	Pro	Thr	Ser	Glu	Ala	Val	Val	Ser	Ala
					20			25				30			

Val	Ser	Glu	Ala	Gly	Ala	Ser	Gly	Ile	Thr	Glu	Ala	Gln	Ala	Arg	Ala
					35			40			45				

Ile	Val	Asn	Ser	Ala	Leu	Lys	Leu	Tyr	Ser	Gln	Asp	Lys	Thr	Gly	Met
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

50	55	60
Val Asp Phe Ala Leu Glu Ser Gly Gly Ser Ile Leu Ser Thr Arg		
65	70	75
Cys Ser Glu Thr Tyr Glu Thr Lys Thr Ala Leu Met Ser Leu Phe Gly		
85	90	95
Ile Pro Leu Trp Tyr Phe Ser Gln Ser Pro Arg Val Val Ile Gln Pro		
100	105	110
Asp Ile Tyr Pro Gly Asn Cys Trp Ala Phe Lys Gly Ser Gln Gly Tyr		
115	120	125
Leu Val Val Arg Leu Ser Met Met Ile His Pro Ala Ala Phe Thr Leu		
130	135	140
Glu His Ile Pro Lys Thr Leu Ser Pro Thr Gly Asn Ile Ser Ser Ala		
145	150	155
Pro Lys Asp Phe Ala Val Tyr Gly Leu Glu Asn Glu Tyr Gln Glu Glu		
165	170	175
Gly Gln Leu Leu Gly Gln Phe Thr Tyr Asp Gln Asp Gly Glu Ser Leu		
180	185	190
Gln Met Phe Gln Ala Leu Lys Arg Pro Asp Asp Thr Ala Phe Gln Ile		
195	200	205
Val Glu Leu Arg Ile Phe Ser Asn Trp Gly His Pro Glu Tyr Thr Cys		
210	215	220
Leu Tyr Arg Phe Arg Val His Gly Glu Pro Val Lys		
225	230	235
<210> 149		
<211> 57		
<212> PRT		
<213> Homo sapiens		
<400> 149		
Met Glu Trp Ser Pro Ser Ala Ser Leu Phe Asn Pro His Ile Trp Ser		
1	5	10
15		
Thr Arg Val Asp Leu Trp Leu Thr Thr Tyr Thr Met Leu Lys Ser Ser		
20	25	30
Ala Thr Ala Thr Thr Ser Cys Gln Lys Val Ser Leu Ala Asn Lys Gln		
35	40	45
Leu Lys Phe Lys Gly Arg Ser Lys Ser		
50	55	

<210> 150
<211> 52
<212> PRT

<213> Homo sapiens

<400> 150

Met His Leu Ala Leu Thr Ser Tyr Ser Ile Leu Pro Val Thr Val Val			
1	5	10	15

Lys Ser Arg Ser Lys Ile Asn Lys Thr Phe Leu Thr Asn Ser Cys Thr		
20	25	30

Ile Phe Ser Phe Val Leu Pro Val Asp Glu Lys Ser Gly Leu Arg Gln		
35	40	45

Ala Ser Tyr Phe

50

<210> 151

<211> 377

<212> PRT

<213> Homo sapiens

<400> 151

Leu Arg Arg Phe Pro Ala Gln Ser Ser Pro Ala Pro Arg Arg Ala Pro			
1	5	10	15

Glu Gln Arg Pro Pro Ala Gly Pro Ala Ser Ala Trp Ser Ser Ser Tyr		
20	25	30

Pro His Ala Pro Tyr Leu Gly Ser Ala Arg Ser Leu Ser Pro His Lys		
35	40	45

Met Ala Asp Gly Gly Ser Pro Phe Leu Gly Arg Arg Asp Phe Val Tyr		
50	55	60

Pro Ser Ser Thr Arg Asp Pro Ser Ala Ser Asn Gly Gly Ser Pro			
65	70	75	80

Ala Arg Arg Glu Glu Lys Lys Arg Lys Ala Ala Arg Leu Lys Phe Asp		
85	90	95

Phe Gln Ala Gln Ser Pro Lys Glu Leu Thr Leu Gln Lys Gly Asp Ile		
100	105	110

Val Tyr Ile His Lys Glu Val Asp Lys Asn Trp Leu Glu Gly Glu His		
115	120	125

His Gly Arg Leu Gly Ile Phe Pro Ala Asn Tyr Val Glu Val Leu Pro		
130	135	140

Ala Asp Glu Ile Pro Lys Pro Ile Lys Pro Pro Thr Tyr Gln Val Leu			
145	150	155	160

Glu Tyr Gly Glu Ala Val Ala Gln Tyr Thr Phe Lys Gly Asp Leu Glu		
165	170	175

Val Glu Leu Ser Phe Arg Lys Gly Glu His Ile Cys Leu Ile Arg Lys		
180	185	190

Val Asn Glu Asn Trp Tyr Glu Gly Arg Ile Thr Gly Thr Gly Arg Gln  
 195 200 205

Gly Ile Phe Pro Ala Ser Tyr Val Gln Val Ser Arg Glu Pro Arg Leu  
 210 215 220

Arg Leu Cys Asp Asp Gly Pro Gln Leu Pro Thr Ser Pro Arg Leu Thr  
 225 230 235 240

Ala Ala Ala Arg Ser Ala Arg Asp Pro Ser Ala Pro Ser Ala Leu Arg  
 245 250 255

Ser Pro Ala Asp Pro Thr Asp Leu Gly Gly Gln Thr Ser Pro Arg Arg  
 260 265 270

Thr Gly Phe Ser Phe Pro Thr Gln Glu Pro Arg Pro Gln Thr Gln Asn  
 275 280 285

Leu Gly Thr Pro Gly Pro Ala Leu Ser His Ser Arg Gly Pro Ser His  
 290 295 300

Pro Leu Asp Leu Gly Thr Ser Ser Pro Asn Thr Ser Gln Ile His Trp  
 305 310 315 320

Thr Pro Tyr Arg Ala Met Tyr Gln Tyr Arg Pro Gln Asn Glu Asp Glu  
 325 330 335

Leu Glu Leu Arg Glu Gly Asp Arg Val Asp Val Met Gln Gln Cys Asp  
 340 345 350

Asp Gly Trp Phe Val Gly Val Ser Arg Arg Thr Gln Lys Phe Gly Thr  
 355 360 365

Phe Pro Gly Asn Tyr Val Ala Pro Val  
 370 375

&lt;210&gt; 152

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 152

Trp Asp Pro Thr Leu Ser Pro Val Gly Val Leu Gly Pro Gly Ser Ile  
 1 5 10 15

Leu Gly Cys Gly Pro Gly Lys Gly Ser Pro Gly Ala Lys  
 20 25

&lt;210&gt; 153

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 153

Met Gln Glu Ala Met Val Lys Thr His Phe His Pro Thr Ser Arg Arg  
 1 5 10 15

Ser Leu Ala Tyr His Thr Leu Leu Pro Ile Pro Ser Glu Pro Leu Phe  
                   20                     25                     30

Ala Ala Pro Gly Glu His Leu His Gln Cys Phe Val Lys Glu Ser Tyr  
                   35                     40                     45

Cys Pro Pro Arg Val Leu Ala Lys Glu Gln  
                   50                     55

<210> 154

<211> 41

<212> PRT

<213> Homo sapiens

<400> 154

Gly Gly Glu Pro Gly Leu Arg Gly Ser Gly Thr Arg Pro Cys Leu Gln  
     1                 5                     10                 15

Trp Ala Ser Trp Ala Pro Ala Leu Phe Trp Ala Ala Gly Leu Gly Arg  
     20                     25                     30

Ala Arg Arg Val Pro Asn Glu Leu Ser  
     35                     40

<210> 155

<211> 75

<212> PRT

<213> Homo sapiens

<400> 155

Met Met Leu Gly Ser Leu Ala Pro Asp Pro Gly Ser Arg Arg His Ser  
     1                 5                     10                 15

Gly Gln Ala Ala Leu Arg Pro Arg Arg Tyr Pro Thr Leu Trp Asp Arg  
     20                     25                     30

Cys Arg Lys Arg Trp Leu Arg Pro Ile Phe Thr Gln Leu Leu Ala Ala  
     35                     40                     45

Val Trp Leu Thr Thr Arg Ser Ser Pro Phe Pro Val Ser Arg Phe Leu  
     50                     55                     60

Gln His Gln Ala Asn Thr Tyr Thr Ser Ala Leu  
     65                     70                     75

<210> 156

<211> 50

<212> PRT

<213> Homo sapiens

<400> 156

Gly Ala Ser Arg Ala Cys Ala Val Val Gly Pro Asp Pro Val Ser Ser  
     1                 5                     10                 15

Gly Arg Leu Gly Pro Arg Leu Tyr Ser Gly Leu Arg Ala Trp Glu Gly  
                  20                     25                     30

Leu Ala Gly Cys Gln Met Ser Cys Pro Asn Ser Ala Gly Leu Gln Leu  
                  35                     40                     45

Pro Ala  
              50

<210> 157  
<211> 97  
<212> PRT  
<213> Homo sapiens

<400> 157  
Gly Thr Pro Gly Pro Tyr Pro Gly Pro Leu Ser Pro Pro Pro Glu Ala  
          1             5                 10                 15

Pro Pro Leu Glu Ser Ala Glu Pro Leu Gly Pro Ala Ala Asp Leu Trp  
          20                     25                     30

Ala Asp Val Asp Leu Thr Glu Phe Asp Gln Tyr Leu Asn Cys Ser Arg  
          35                     40                     45

Thr Arg Pro Asp Ala Pro Gly Leu Pro Tyr His Val Ala Leu Ala Lys  
          50                     55                     60

Leu Gly Pro Arg Ala Met Ser Cys Pro Glu Glu Ser Ser Leu Ile Ser  
          65                     70                     75                 80

Ala Leu Ser Asp Ala Ser Ser Ala Val Tyr Tyr Ser Ala Cys Ile Ser  
          85                     90                     95

Gly

<210> 158  
<211> 173  
<212> PRT  
<213> Homo sapiens

<400> 158  
Gly Leu Phe Pro Ala Val Cys Pro Trp Pro Ala Leu Asp Leu Leu Ser  
          1             5                 10                 15

Gly Pro Gln Trp Gln Arg Gly Pro Gly Pro Gly Ala Gly Val Gly Asp  
          20                     25                     30

Pro Gly Leu Ser Ala Val Ala Phe Trp Trp Gly Ala Met Glu Thr Gly  
          35                     40                     45

Asn Gln Ala Val Gly Ser Gln Arg Trp Ser Leu Arg Gly Glu Trp Arg  
          50                     55                     60

Ala Phe Cys Phe Cys Leu Val Pro Pro His Gly Thr Trp Phe Pro Gly  
          65                     70                     75                 80

Glu Asn Glu Arg Arg Gly Glu Val Glu Asn Arg Thr Phe His Lys Gly  
 85 90 95

Tyr Phe Leu Ile Gly Cys Lys Met Leu Met Pro Arg Met Met Ile Phe  
 100 105 110

Phe Pro Ala Asp Glu Thr Ile Arg Lys Gly Leu Arg Leu Trp Gln Val  
 115 120 125

Gly Phe Gly Ala Gly Ala Glu Thr Phe Leu Ser Met Arg Thr Ser Tyr  
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Ser Ser Ser Trp Gly Gly Ala Ala Cys Gly Met Ala Gly Glu Asp Ala  
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Leu Glu Asn Arg Pro Pro Ser Val Glu Gly Pro Phe Pro  
 165 170

<210> 159

<211> 109

<212> PRT

<213> Homo sapiens

<400> 159

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Trp Pro Cys Leu Cys Pro Ala Arg Gly Arg Gly Leu Trp Thr Ser Arg  
 35 40 45

Pro Ser Gly Trp Gly Ser Arg Ser Val Gln Ala Gly Ser Ser Thr Cys  
 50 55 60

Pro Pro Arg Gln Pro Ser Pro Ser Leu Ser Ala Gly Ala Ala Gly Pro  
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Ala Gly Ala Phe Pro Ala Thr Leu Phe Leu His Val Leu Pro Ser Gln  
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Pro Arg Pro Ser Thr Gly Lys Thr Ser Arg Leu Thr Pro  
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<210> 160

<211> 152

<212> PRT

<213> Homo sapiens

<400> 160

Asn Ile Arg Gly Asn Gln His Leu Lys Asn Arg Leu His Glu Arg Arg  
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20

25

30

Thr Glu Arg Pro Gly Ala Pro Ser Trp Phe Pro Leu Val Pro Asn Glu  
 35                    40                    45

Thr Glu Arg Leu Lys Glu Leu Pro Gly Met Val Thr Ala Glu Lys Lys  
 50                    55                    60

Ser Ser Glu Trp Leu His Ala Ala Ala Ala Cys Val His Leu Pro Ser  
 65                    70                    75                    80

Thr Gln Asp Ser Pro Arg Gln Gln Leu Val Phe Thr Cys Pro Pro Pro  
 85                    90                    95

Arg Thr Val Pro Gly Leu Ala Pro Gly Cys Arg Gly Ser Ala Glu Gly  
 100                  105                  110

Ala Ser Cys Pro Ile Ser Leu Ala Asn Ser Leu Leu Leu Leu Gly Pro  
 115                  120                  125

His Lys Arg His Gly Arg Met Phe Leu Ile Arg Gln Glu His Arg Thr  
 130                  135                  140

Pro Asn Pro Ser Leu Cys Leu Ala  
 145                  150

&lt;210&gt; 161

&lt;211&gt; 3096

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 161

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 <211> 1987  
 <212> DNA  
 <213> Homo sapiens

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 agtaggc 1987

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 <211> 1107  
 <212> DNA  
 <213> Homo sapiens

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<210> 164  
 <211> 1062  
 <212> DNA  
 <213> Homo sapiens

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<212> DNA  
<213> Homo sapiens

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	tagatagata	gatatatgag	agagatata	tca	tgaggatgtt	tttctgagga	2580
	ttttttgtt	ctgctggatt	aa	tttgc	tttgc	tttgc	2640

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<210> 166  
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 <212> DNA  
 <213> Homo sapiens

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<213> Homo sapiens

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&lt;213&gt; Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 174

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aagctgtccc ggctggcgta ccacccctg aagatgcaga gctgctatga gaagatggag 720  
tcgctgcgac tggacgggct gcagcagcga tttgatgtgt ccagcacgtc cgtgttcaag 780  
cagcgagccc agatccacat gccccggcaaa atggacaatg ccgtgtatac gtgcgagacc 840  
ctcctgcacc aggagctggg gaagggccc accaaggagg agctgtgcaa gtccatccag 900  
cgggtccctgg agccgggtgct gaagaaatac gactacgaca gcagctctgt gcggaaagagg 960  
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atcctgggtgg aaaacacgtt cggagggtg gtgctgcaga ccgtcatgaa ggacatccctg 1140  
caggctgtga aggaggccgc ggtgcagagg aagcacaacc tctaccggg cagcatggtc 1200  
atgcacaaca ggcaccccaa cctgcacccgt ctggccgagg ggcaccccat cgactgggc 1260  
gaggagtaca gcaacagcgg cggggccggc agcccagccc cagcaccccg gagtcagcca 1320  
ccctctcgga aaagcgcacgg cgcgcacccg aggtggcttc tgcgttccag gatgaggagg 1380  
tggggctgcc ctttgggtct agccctgagt caccaccacc tgcgtccctg gacgggtgtca 1440  
ctgagatccg aggcctgctg gcccaagggtc tgccggctga gagccccca ccagccggcc 1500  
ccctgctcaa cggggccccc gctggggaga gtccccagcc taaggccgccc cccgaggcct 1560

cctcgccgccc tgcttcaccc ctccagcata tcctgcctgg aaaggctgtg gaccttggc 1620  
 ccccccaagcc cagcgaccag gagactggag agcaggtgtc cagccccagc agccaccccg 1680  
 ccctccacac caccaccgag gacagtgcag gggtgtcagac tgagttctag gccagtgggt 1740  
 ccctgactgc tgcacatggc acaggccgtt cccttcggc cccaggcagg ctcagctctg 1800  
 gggagggcac ccttgtctgt gccttgtggg tggaggcggg gcagggctgt gtggcacccgc 1860  
 cagggagccg gcccacactga gtcactttat tgggttcagt caacacttc ttgtccctg 1920  
 ttttctcttc tggggatgtc ttcagatgc aggggctgtt tttgggggtt tcctgctgt 1980  
 gccaagggct ggacactgtc gggggctgg aaagccctc ctttcctgtc cttctgtggc 2040  
 ctccatcccc tcatgggtgc tgccatcctt cctggagaga gggaggtgaa agctgggtg 2100  
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 tgctgggtgg agagatgaga tttaggggt gcctcatggg gtggcaggc ctggggtaa 2340  
 atgagaaagg cccagaacgt gcaggtctgc ggaggggaaag tgtcctgagt gaaggaggg 2400  
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 tggggagccct gagttttat gggcctgtgt atcccccttcc cccggcccca gcttcctcc 2520  
 ctccctgcccc cctggccac aggtctccct ctggtccctg tccctctggt ggtggggat 2580  
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 tccctgaggg tctgggtca ggcttggcc tctgctgcct ctcagtcacc aagtccaccc 2760  
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 cgtagacctg ctccccagag gaggggcctt gaccacagg acgtgtggtg gcgcctggca 3060  
 ctcagggacc cccagctgcc ccagccctgg tctctggcgc atcttccc tcttgcctcc 3120  
 aagatctgcg cctctagtgc ctttgaggg gttccatca tccctccctg atattgtatt 3180  
 gaaaatatta tgcacactgt tcatgcttct actaatcaat aaacgcttta tttaaagcca 3240  
 aaaaaaaaaaag agggcggaaaa aaggg 3265

&lt;210&gt; 179

&lt;211&gt; 262

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 179

Ser	Leu	Cys	Val	Phe	Pro	Ser	Ser	Ala	Ala	Ser	Phe	Leu	Ser	Phe	Leu
1								10					15		

Ala	Leu	Val	Val	Ala	Ala	Thr	Met	Asn	Lys	Lys	Lys	Lys	Pro	Phe	Leu
							20		25				30		

Gly	Met	Pro	Ala	Pro	Leu	Gly	Tyr	Val	Pro	Gly	Leu	Gly	Arg	Gly	Ala
							35		40			45			

Thr	Gly	Phe	Thr	Thr	Arg	Ser	Asp	Ile	Gly	Pro	Ala	Arg	Asp	Ala	Asn
							50		55			60			

Asp	Pro	Val	Asp	Asp	Arg	His	Ala	Pro	Pro	Gly	Lys	Arg	Thr	Val	Gly
							65		70		75		80		

Asp	Gln	Met	Lys	Lys	Asn	Gln	Ala	Ala	Asp	Asp	Asp	Glu	Asp	Leu
							85		90			95		

Asn	Asp	Thr	Asn	Tyr	Asp	Glu	Phe	Asn	Gly	Tyr	Ala	Gly	Ser	Leu	Phe
							100		105			110			

Ser	Ser	Gly	Pro	Tyr	Glu	Lys	Asp	Asp	Glu	Glu	Ala	Asp	Ala	Ile	Tyr
115					120						125				
Ala	Ala	Leu	Asp	Lys	Arg	Met	Asp	Glu	Arg	Arg	Lys	Glu	Arg	Arg	Glu
130					135						140				
Gln	Arg	Glu	Lys	Glu	Glu	Ile	Glu	Lys	Tyr	Arg	Met	Glu	Arg	Pro	Lys
145					150					155					160
Ile	Gln	Gln	Gln	Phe	Ser	Asp	Leu	Lys	Arg	Lys	Leu	Ala	Glu	Val	Thr
	165						170					175			
Glu	Glu	Glu	Trp	Leu	Ser	Ile	Pro	Glu	Val	Gly	Asp	Ala	Arg	Asn	Lys
	180						185					190			
Arg	Gln	Arg	Asn	Pro	Arg	Tyr	Glu	Lys	Leu	Thr	Pro	Val	Pro	Asp	Ser
	195						200					205			
Phe	Phe	Ala	Lys	His	Leu	Gln	Thr	Gly	Glu	Asn	His	Thr	Ser	Val	Asp
	210					215					220				
Pro	Arg	Gln	Thr	Gln	Phe	Gly	Gly	Leu	Asn	Thr	Pro	Tyr	Pro	Gly	Gly
	225				230					235					240
Leu	Asn	Thr	Pro	Tyr	Pro	Gly	Gly	Met	Thr	Pro	Gly	Leu	Met	Thr	Pro
	245					250						255			
Gly	Thr	Val	Ser	Trp	Thr										
	260														

&lt;210&gt; 180

&lt;211&gt; 467

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 180

His	Thr	Leu	Ser	Arg	Trp	Thr	Lys	His	Ser	Ile	Pro	Arg	Trp	Asn	Asp
1								10					15		

Ala	Arg	Thr	Asp	Asp	Thr	Trp	His	Ser	Glu	Leu	Asp	Met	Arg	Lys	Ile
	20							25					30		

Gly	Gln	Ala	Arg	Asn	Thr	Leu	Met	Asp	Met	Arg	Leu	Ser	Gln	Val	Ser
	35							40					45		

Asp	Ser	Val	Ser	Gly	Gln	Thr	Val	Val	Asp	Pro	Lys	Gly	Tyr	Leu	Thr
	50						55				60				

Asp	Leu	Asn	Ser	Met	Ile	Pro	Thr	His	Gly	Gly	Asp	Ile	Asn	Asp	Ile
	65				70				75						80

Lys	Lys	Ala	Arg	Leu	Leu	Leu	Lys	Ser	Val	Arg	Glu	Thr	Asn	Pro	His
		85						90					95		

His	Pro	Pro	Ala	Trp	Ile	Ala	Ser	Ala	Arg	Leu	Glu	Glu	Val	Thr	Gly
			100					105					110		

Lys Leu Gln Val Ala Arg Asn Leu Ile Met Lys Gly Thr Glu Met Cys  
 115 120 125

Pro Lys Ser Glu Asp Val Trp Leu Glu Ala Ala Arg Leu Gln Pro Gly  
 130 135 140

Asp Thr Ala Lys Ala Val Val Ala Gln Ala Val Arg His Leu Pro Gln  
 145 150 155 160

Ser Val Arg Ile Tyr Ile Arg Ala Ala Glu Leu Glu Thr Asp Ile Arg  
 165 170 175

Ala Lys Lys Arg Val Leu Arg Lys Ala Leu Glu His Val Pro Asn Ser  
 180 185 190

Val Arg Leu Trp Lys Ala Ala Val Glu Leu Glu Glu Pro Glu Asp Ala  
 195 200 205

Arg Ile Met Leu Ser Arg Ala Val Glu Cys Cys Pro Thr Ser Val Glu  
 210 215 220

Leu Trp Leu Ala Leu Ala Arg Leu Glu Thr Tyr Glu Asn Ala Arg Lys  
 225 230 235 240

Val Leu Asn Lys Ala Arg Glu Asn Ile Pro Thr Asp Arg His Ile Trp  
 245 250 255

Ile Thr Ala Ala Lys Leu Glu Ala Asn Gly Asn Thr Gln Met Val  
 260 265 270

Glu Lys Ile Ile Asp Arg Ala Ile Thr Ser Leu Arg Ala Asn Gly Val  
 275 280 285

Glu Ile Asn Arg Glu Gln Trp Ile Gln Asp Ala Glu Glu Cys Asp Arg  
 290 295 300

Ala Gly Ser Val Ala Thr Cys Gln Ala Val Met Arg Ala Val Ile Gly  
 305 310 315 320

Ile Gly Ile Glu Glu Asp Arg Lys His Thr Trp Met Glu Asp Ala  
 325 330 335

Asp Ser Cys Val Ala His Asn Ala Leu Glu Cys Ala Arg Ala Ile Tyr  
 340 345 350

Ala Tyr Ala Leu Gln Val Phe Pro Ser Lys Lys Ser Val Trp Leu Arg  
 355 360 365

Ala Ala Tyr Phe Glu Lys Asn His Gly Thr Arg Glu Ser Leu Glu Ala  
 370 375 380

Leu Leu Gln Arg Ala Val Ala His Cys Pro Lys Ala Glu Val Leu Trp  
 385 390 395 400

Leu Met Gly Ala Lys Ser Lys Trp Leu Ala Gly Asp Val Pro Ala Ala  
 405 410 415

Arg Ser Ile Leu Ala Leu Ala Phe Gln Ala Asn Pro Asn Ser Glu Glu

420

425

430

Ile Trp Leu Ala Ala Val Lys Leu Glu Ser Glu Asn Asp Glu Tyr Glu  
 435 440 445

Arg Ala Arg Arg Leu Leu Ala Lys Ala Arg Thr Val Pro Pro Pro Pro  
 450 455 460

Gly Cys Ser  
 465

&lt;210&gt; 181

&lt;211&gt; 284

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 181

Val Arg Ala Gly Pro Glu Ala Ala Gly Gln Gly Ala Asp Ser Ala Pro  
 1 5 10 15

Thr Ala Arg Val Phe Met Lys Ser Val Lys Leu Glu Trp Val Gln Asp  
 20 25 30

Asn Ile Arg Ala Ala Gln Asp Leu Cys Glu Ala Leu Arg His Tyr  
 35 40 45

Glu Asp Phe Pro Lys Leu Trp Met Met Lys Gly Gln Ile Glu Glu Gln  
 50 55 60

Lys Glu Met Met Glu Lys Ala Arg Glu Ala Tyr Asn Gln Gly Leu Lys  
 65 70 75 80

Lys Cys Pro His Ser Thr Pro Leu Trp Leu Leu Leu Ser Arg Leu Glu  
 85 90 95

Glu Lys Ile Gly Gln Leu Thr Arg Ala Arg Ala Ile Leu Glu Lys Ser  
 100 105 110

Arg Leu Lys Asn Pro Lys Asn Pro Gly Leu Trp Leu Glu Ser Val Arg  
 115 120 125

Leu Glu Tyr Arg Ala Gly Leu Lys Asn Ile Ala Asn Thr Leu Met Ala  
 130 135 140

Lys Ala Leu Gln Glu Cys Pro Asn Ser Gly Ile Leu Trp Ser Glu Ala  
 145 150 155 160

Ile Phe Leu Glu Ala Arg Pro Gln Arg Arg Thr Lys Ser Val Asp Ala  
 165 170 175

Leu Lys Lys Cys Glu His Asp Pro His Val Leu Leu Ala Val Ala Lys  
 180 185 190

Leu Phe Trp Ser Gln Arg Lys Ile Thr Lys Ala Arg Glu Trp Phe His  
 195 200 205

Arg Thr Val Lys Ile Asp Ser Asp Leu Gly Asp Ala Trp Ala Phe Phe

210	215	220
Tyr Lys Phe Glu Leu Gln His Gly Thr Glu Glu Gln Gln Glu Glu Val		
225	230	235
Arg Lys Arg Cys Glu Ser Ala Glu Pro Arg His Gly Glu Leu Trp Cys		
245	250	255
Ala Val Ser Lys Asp Ile Ala Asn Trp Gln Lys Lys Ile Gly Asp Ile		
260	265	270
Leu Arg Leu Val Ala Gly Arg Ile Lys Asn Thr Phe		
275	280	

<210> 182  
<211> 75  
<212> PRT  
<213> Homo sapiens

<400> 182		
Gln Pro Gly Ile Lys Glu Ser Ile Leu Met Lys Glu Thr Gln Gly Pro		
1	5	10
Tyr Gly Gln Gly Phe Leu Gly Gln Asp Ser His Gln His Ile Thr His		
20	25	30
Val Leu Leu Gly Arg Glu Lys Gln Tyr Ile Pro Val Glu Arg Ser Gln		
35	40	45
Ser Ile Ser Gly Arg Asn Val Val Lys Gly Gly Arg Cys Tyr Ala Ala		
50	55	60
Ala Pro Ser Val Pro Glu Val Ala Val Ile Pro		
65	70	75

<210> 183  
<211> 75  
<212> PRT  
<213> Homo sapiens

<400> 183		
Thr Phe Leu Leu Ser Leu Ser Tyr Ser Ser Arg Tyr Phe Ser Gln		
1	5	10
Glu Phe Gln Arg Arg Leu Leu Leu Lys Cys Leu Leu Ala Ala Gln Tyr		
20	25	30
Gln Ser Ile Asn Tyr Pro Phe Trp Gly Leu Ala Leu Glu Ile Ile Phe		
35	40	45
Val Gly Arg Pro Asn Ser Ser Gln Gln Gly Ser Gln Ala Cys Leu Leu		
50	55	60
Asp Leu Phe Pro Leu Arg Gly Arg Asn Glu Leu		
65	70	75

&lt;210&gt; 184

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 184

Gln	Gly	Thr	Arg	His	Pro	Gln	Ser	Leu	Ser	His	Lys	Pro	Ala	Lys	Lys
1															
					5					10					15

Ile	Asp	Val	Ala	Arg	Val	Thr	Phe	Asp	Leu	Tyr	Lys	Leu	Asn	Pro	Gln
					20				25						30

Asp	Phe	Ile	Gly	Cys	Leu	Asn	Val	Lys	Ala	Thr	Phe	Tyr	Asp	Thr	Tyr
					35			40				45			

Ser	Leu	Ser	Tyr	Asp	Leu	His	Cys	Cys	Gly	Ala	Lys	Arg	Ile	Met	Lys
					50			55			60				

Glu	Ala	Phe	Arg	Trp	Ala	Leu	Phe	Ser	Met	Gln	Ala	Thr	Gly	His	Val
					65		70			75					80

Leu	Leu	Gly	Thr	Ser	Cys	Tyr	Leu	Gln	Gln	Leu	Leu	Asp	Ala	Thr	Glu
					85			90							95

Glu	Gly	Gln	Pro	Pro	Lys	Gly	Lys	Ala	Ser	Ser	Leu	Ile	Pro	Thr	Cys
					100			105				110			

Leu	Lys	Ile	Leu	Gln											
					115										

&lt;210&gt; 185

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 185

Lys	Ser	Ala	Ala	Gln	Thr	Ala	Met	Thr	Thr	Pro	Pro	Gln	Thr	Pro	Pro
1															
					5			10						15	

His	Pro	Tyr	Phe	Ile	Asn	Arg	Gln	Asp	Phe	Pro	Cys	Ile	Leu	Leu	Arg
					20			25							30

Ile	Ser	Ser	Ser	His	Ser	Pro	Ala	Pro	Ser	Pro	Met	Ser	Trp	Leu	His
				35			40				45				

His	Cys	Lys	Thr	Asp	Leu	Leu	Gln	Gly	Ser	Gln	Lys	Leu	Leu	Leu	Ala
					50			55			60				

Leu	Tyr	His	Phe	Tyr	Pro	His	Leu	Pro	Pro	Glu	Thr	Ala	Thr	Ile	His
					65		70			75					80

Ser	His	Cys	Pro	Ser	Ala	Leu	Arg	Pro	Ser	Ser	Arg	Ala	Asp	Gly	Ser
					85			90				95			

Met	Val	Ile	Leu	Ser	Trp	Val	Val	Leu	Leu	Lys	Pro	Ser	Gln	Gly	Ala
					100			105				110			

Asp Ser Gln Arg Ala Ser Arg Val Ser Gly Leu Asp Asp Ser Lys Glu  
 115 120 125

Gly Thr Pro Ile Phe Ile Phe Lys Thr Asp Ile Pro Arg Gly Phe  
 130 135 140

<210> 186

<211> 84

<212> PRT

<213> Homo sapiens

<400> 186

Thr Gln Thr Arg His Phe Gln Leu Ala Thr Gln Ser Gly Arg Ala Gly  
 1 5 10 15

Gly Asn Thr Asp Leu Asp Ile His Lys Lys Ile Lys Pro Lys Ile Lys  
 20 25 30

His Ser Ile Leu Cys Pro Leu Lys Gly Leu Ile Lys Gly Thr Gln Ser  
 35 40 45

Pro Pro Arg Ser Pro Leu Pro Cys Gln His His Lys Ala Ser Ser Ala  
 50 55 60

His Thr Lys Gly Leu Gly Arg Gly Ile Leu Leu Pro Pro His Gln Pro  
 65 70 75 80

Gln Glu Trp Thr

<210> 187

<211> 114

<212> PRT

<213> Homo sapiens

<400> 187

Arg His Trp Gly Phe Thr Ala Ser Ile Phe Ser Leu Lys Arg Phe Ile  
 1 5 10 15

Thr Ser Thr Ser Lys Glu Gln Thr Asn Trp Arg Asn Val Cys Phe Phe  
 20 25 30

Phe Leu Phe Ile Lys Phe Tyr Ser Thr Ala Lys Phe Gln Ile Ser Phe  
 35 40 45

Thr Tyr Arg Pro Cys Lys Gly Thr Val Arg Thr Glu His Leu Phe Tyr  
 50 55 60

Leu Arg Asp Lys Gly Val Glu Ile Phe Ser Leu Asn Phe Ile Arg Lys  
 65 70 75 80

Gly Trp Val Gln Trp Leu Met Pro Val Ile Ser Ala Phe Trp Glu Ala  
 85 90 95

Glu Ala Gly Arg Ser Leu Val Ala Arg Ser Leu Arg Pro Ala Trp Ala

100

105

110

Thr Gln

&lt;210&gt; 188

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 188

Asn	Leu	Ile	Asn	Lys	Lys	Lys	His	Thr	Phe	Leu	Gln	Leu	Val	Cys
1				5				10					15	

Ser	Leu	Leu	Val	Glu	Val	Ile	Asn	Arg	Phe	Lys	Glu	Lys	Ile	Leu	Ala
						20		25					30		

Val	Asn	Pro	Gln	Cys	Leu	Gln	Leu	Phe	Trp	Gln	Asn	Ile	Phe	Lys	Glu
					35			40				45			

Ile	Gln	Gln	Ala	Asn	Phe	Glu	Val	Leu	Met	Lys	Val	Lys	Glu	Gly	Gly
					50			55			60				

Ile	Ser	Ser	Phe	Gly	Arg	Asn	Glu	Lys	Cys	Leu	Thr	Arg	Asp	Ile	Thr
65					70				75			80			

Thr	His	Val	Gly	Ser	Gly	Cys	Phe	Leu	Pro	Lys	Thr	Phe	Arg	Glu	Glu
						85			90			95			

Val Asn

&lt;210&gt; 189

&lt;211&gt; 437

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 189

Lys	Tyr	Glu	Leu	Tyr	Thr	Glu	Asn	Ala	Thr	Thr	Glu	Lys	Thr	Glu	Pro
1					5				10			15			

Asn	Ser	Gln	Glu	Asp	Lys	Asn	Asp	Gly	Gly	Lys	Ser	Arg	Lys	Gly	Asn
					20			25			30				

Ile	Glu	Leu	Ala	Ser	Ser	Glu	Pro	Gln	His	Phe	Thr	Thr	Thr	Val	Thr
35						40					45				

Arg	Cys	Ser	Pro	Thr	Val	Ala	Phe	Val	Glu	Phe	Pro	Ser	Ser	Pro	Gln
50						55				60					

Leu	Lys	Asn	Asp	Val	Ser	Glu	Glu	Lys	Asp	Gln	Lys	Lys	Pro	Glu	Asn
65					70				75			80			

Glu	Met	Ser	Gly	Lys	Val	Glu	Leu	Val	Leu	Ser	Gln	Lys	Val	Val	Lys
					85				90			95			

Pro Lys Ser Pro Glu Pro Glu Ala Thr Leu Thr Phe Pro Phe Leu Asp  
 100 105 110  
 Lys Met Pro Glu Ala Asn Gln Leu His Leu Pro Asn Leu Asn Ser Gln  
 115 120 125  
 Val Asp Ser Pro Ser Ser Glu Lys Ser Pro Val Met Thr Pro Phe Lys  
 130 135 140  
 Phe Trp Ala Trp Asp Pro Glu Glu Glu Arg Arg Arg Gln Glu Lys Trp  
 145 150 155 160  
 Gln Gln Glu Gln Glu Arg Leu Leu Gln Glu Arg Tyr Gln Lys Glu Gln  
 165 170 175  
 Asp Lys Leu Lys Glu Glu Trp Glu Lys Ala Gln Lys Glu Val Glu Glu  
 180 185 190  
 Glu Glu Arg Arg Tyr Tyr Glu Glu Glu Arg Lys Ile Ile Glu Asp Thr  
 195 200 205  
 Val Val Pro Phe Thr Val Ser Ser Ser Ser Ala Asp Gln Leu Ser Thr  
 210 215 220  
 Ser Ser Ser Met Thr Glu Gly Ser Gly Thr Met Asn Lys Ile Asp Leu  
 225 230 235 240  
 Gly Asn Cys Gln Asp Glu Lys Gln Asp Arg Arg Trp Lys Lys Ser Phe  
 245 250 255  
 Gln Gly Asp Asp Ser Asp Leu Leu Leu Lys Thr Arg Glu Ser Asp Arg  
 260 265 270  
 Leu Glu Glu Lys Gly Ser Leu Thr Glu Gly Ala Leu Ala His Ser Gly  
 275 280 285  
 Asn Pro Val Ser Lys Gly Val His Glu Asp His Gln Leu Asp Thr Glu  
 290 295 300  
 Ala Gly Ala Pro His Cys Gly Thr Asn Pro Gln Leu Ala Gln Asp Pro  
 305 310 315 320  
 Ser Gln Asn Gln Gln Thr Ser Asn Pro Thr His Ser Ser Glu Asp Val  
 325 330 335  
 Lys Pro Lys Thr Leu Pro Leu Asp Lys Ser Ile Asn His Gln Ile Glu  
 340 345 350  
 Ser Pro Ser Glu Arg Arg Lys Ser Ile Ser Gly Lys Lys Leu Cys Ser  
 355 360 365  
 Ser Cys Gly Leu Pro Leu Gly Lys Gly Ala Ala Met Ile Ile Glu Thr  
 370 375 380  
 Leu Asn Leu Tyr Phe His Ile Gln Cys Phe Arg Cys Gly Ile Cys Lys  
 385 390 395 400  
 Gly Gln Leu Gly Asp Ala Val Ser Gly Thr Asp Val Arg Ile Arg Asn

1

111

405                    410                    415

Gly Leu Leu Asn Cys Asn Asp Cys Tyr Met Arg Ser Arg Ser Ala Gly  
420                    425                    430

Gln Pro Thr Thr Leu  
435

<210> 190  
<211> 331  
<212> PRT  
<213> Homo sapiens

<400> 190  
Ser Ala Asn His Lys Leu Glu Val Asn Gly Thr Asp Gly Leu Ala Pro  
1                    5                    10                    15

Val Glu Val Glu Glu Leu Leu Arg Gln Ala Ser Glu Arg Asn Ser Lys  
20                    25                    30

Ser Pro Thr Glu Tyr His Glu Pro Val Tyr Ala Asn Pro Phe Tyr Arg  
35                    40                    45

Pro Thr Thr Pro Gln Arg Glu Thr Val Thr Pro Gly Pro Asn Phe Gln  
50                    55                    60

Glu Arg Ile Lys Ile Lys Thr Asn Gly Leu Gly Ile Gly Val Asn Glu  
65                    70                    75                    80

Ser Ile His Asn Met Gly Asn Gly Leu Ser Glu Glu Arg Gly Asn Asn  
85                    90                    95

Phe Asn His Ile Ser Pro Ile Pro Pro Val Pro His Pro Arg Ser Val  
100                    105                    110

Ile Gln Gln Ala Glu Glu Lys Leu His Thr Pro Gln Lys Arg Leu Met  
115                    120                    125

Thr Pro Trp Glu Glu Ser Asn Val Met Gln Asp Lys Asp Ala Pro Ser  
130                    135                    140

Pro Lys Pro Arg Leu Ser Pro Arg Glu Thr Ile Phe Gly Lys Ser Glu  
145                    150                    155                    160

His Gln Asn Ser Ser Pro Thr Cys Gln Glu Asp Glu Asp Val Arg  
165                    170                    175

Tyr Asn Ile Val His Ser Leu Pro Pro Asp Ile Asn Asp Thr Glu Pro  
180                    185                    190

Val Thr Met Ile Phe Met Gly Tyr Gln Gln Ala Glu Asp Ser Glu Glu  
195                    200                    205

Asp Lys Lys Phe Leu Thr Gly Tyr Asp Gly Ile Ile His Ala Glu Leu  
210                    215                    220

Val Val Ile Asp Asp Glu Glu Glu Asp Glu Gly Glu Ala Glu Lys

225	230	235	240
Pro Ser Tyr His Pro Ile Ala Pro His Ser Gln Val Tyr Gln Pro Ala			
245	250	255	
Lys Pro Thr Pro Leu Pro Arg Lys Arg Ser Glu Ala Ser Pro His Glu			
260	265	270	
Asn Thr Asn His Lys Ser Pro His Lys Asn Ser Ile Ser Leu Lys Glu			
275	280	285	
Gln Glu Glu Ser Leu Gly Ser Pro Val His His Ser Pro Phe Asp Ala			
290	295	300	
Gln Thr Thr Gly Asp Gly Thr Glu Asp Pro Ser Leu Thr Ala Leu Arg			
305	310	315	320
Met Arg Met Ala Lys Leu Gly Lys Lys Val Ile			
325	330		

&lt;210&gt; 191

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 191

Leu Ser Leu Thr Ser Arg Met Glu Glu Ala Glu Leu Val Lys Gly Arg			
1	5	10	15

Leu Gln Ala Ile Thr Asp Lys Arg Lys Ile Gln Glu Glu Ile Ser Gln			
20	25	30	

Lys Arg Leu Lys Ile Glu Glu Asp Lys Leu Lys His Gln His Leu Lys			
35	40	45	

Lys Lys Ala Leu Arg Glu Lys Trp Leu Leu Asp Gly Ile Ser Ser Gly			
50	55	60	

Lys Glu Gln Glu Glu Met Lys Lys Gln Asn Gln Gln Asp Gln His Gln			
65	70	75	80

Ile Gln Val Leu Glu Gln Ser Ile Leu Arg Leu Glu Lys Glu Ile Gln			
85	90	95	

Asp Leu Glu Lys Ala Glu Leu Gln Ile Ser Thr Lys Glu Glu Ala Ile			
100	105	110	

Leu Lys Lys Leu Lys Ser Ile Glu Arg Thr Thr Glu Asp Ile Ile Arg			
115	120	125	

Ser Val Lys Val Glu Arg Glu Glu Arg Ala Glu Glu Ser Ile Glu Asp			
130	135	140	

Ile Tyr Ala Asn Ile Pro Asp Leu Pro Lys Ser Tyr Ile Pro Ser Arg			
145	150	155	160

Leu Arg Lys Glu Ile Asn Glu Glu Lys Glu Asp Asp Glu Gln Asn Arg			
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113

165                    170                    175

Lys Ala Leu Tyr Ala Met Glu Ile Lys Val Glu Lys Asp Leu Lys Thr  
180                    185                    190

Gly Glu Ser Thr Val Leu Ser Ser Asn Thr Ser Gly His Gln Met Thr  
195                    200                    205

Leu Lys Gly Thr Gly Val Lys Val  
210                    215

<210> 192  
<211> 290  
<212> PRT  
<213> Homo sapiens

<400> 192  
Arg Gly Ala Gly Thr Gln Pro Gly Pro Leu Leu Lys Lys Pro Tyr Gln  
1                    5                    10                    15

Pro Arg Ile Lys Ile Ser Lys Thr Ser Val Asp Gly Asp Pro His Phe  
20                    25                    30

Val Val Asp Phe Pro Leu Ser Arg Leu Thr Val Cys Phe Asn Ile Asp  
35                    40                    45

Gly Gln Pro Gly Asp Ile Leu Arg Leu Val Ser Asp His Arg Asp Ser  
50                    55                    60

Gly Val Thr Val Asn Gly Glu Leu Ile Gly Ala Pro Ala Pro Pro Asn  
65                    70                    75                    80

Gly His Lys Lys Gln Arg Thr Tyr Leu Arg Thr Ile Thr Ile Leu Ile  
85                    90                    95

Asn Lys Pro Glu Arg Ser Tyr Leu Glu Ile Thr Pro Ser Arg Val Ile  
100                    105                    110

Leu Asp Gly Gly Asp Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val  
115                    120                    125

Val Gly Ser Trp Gly Leu Glu Val Ser Val Ser Ala Asn Ala Asn Val  
130                    135                    140

Thr Val Thr Ile Gln Gly Ser Ile Ala Phe Val Ile Leu Ile His Leu  
145                    150                    155                    160

Tyr Lys Lys Pro Ala Pro Phe Gln Arg His His Leu Gly Phe Tyr Ile  
165                    170                    175

Ala Asn Ser Glu Gly Leu Ser Ser Asn Cys His Gly Leu Leu Gly Gln  
180                    185                    190

Phe Leu Asn Gln Asp Ala Arg Leu Thr Glu Asp Pro Ala Gly Pro Ser  
195                    200                    205

Gln Asn Leu Thr His Pro Leu Leu Leu Gln Val Gly Glu Gly Pro Glu

210	215	220
Ala Val Leu Thr Val Lys Gly His Gln Val Pro Val Val Trp Lys Gln		
225	230	235
Arg Lys Ile Tyr Asn Gly Glu Glu Gln Ile Asp Cys Trp Phe Ala Arg		
245	250	255
Asn Asn Ala Ala Lys Leu Ile Asp Gly Glu Tyr Lys Asp Tyr Leu Ala		
260	265	270
Ser His Pro Phe Asp Thr Gly Met Thr Leu Gly Gln Gly Met Ser Arg		
275	280	285
Glu Leu		
290		

<210> 193  
<211> 87  
<212> PRT  
<213> Homo sapiens

<400> 193			
Gly His Gly Ser Tyr Arg Thr Pro Lys Arg Ser Ser Thr Asn Cys Leu			
1	5	10	15
Gly Lys Phe Trp Glu Leu Ala Asp Ala Lys Lys Lys Arg Lys Lys Val			
20	25	30	
His Gln Lys Gln Lys Arg Ala Thr Ile Arg Ala Thr Glu Leu Ala Lys			
35	40	45	
Gly Lys Arg His Val Gly Gly Ser Val Ser His Leu Ser Pro Gly Thr			
50	55	60	
Val Lys Cys Val Ile Thr Ala Gln Val His Gly Lys Arg Gln Gln Gln			
65	70	75	80
Lys Ala Leu Cys Arg Leu Glu			
85			

<210> 194  
<211> 82  
<212> PRT  
<213> Homo sapiens

<400> 194			
Gln Phe Ile Gln Gly Met Cys Ser Arg Lys Phe Ala Trp Tyr Leu Phe			
1	5	10	15
Val Lys His Leu Lys Val Pro Gln Ile Gly Phe Lys Val Pro Gly Ala			
20	25	30	
Val Gly Trp His Glu Asp Pro Arg Lys Ala Thr Glu His Pro Ala Arg			
35	40	45	

Leu Leu His Arg Ala Gly Glu Val Thr Phe Tyr Leu Phe Phe Arg Leu  
 50 55 60

His Pro Ile Phe His Leu Pro Phe Leu Gln Arg Ala Gln Gly Ala Ile  
 65 70 75 80

Ile Phe

<210> 195  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 195  
 Asp Asp Arg Ser His Ala Phe His His His Lys Ser Val Ile Asp Ala  
 1 5 10 15

Met Lys Gly Arg Pro Gly Gln Ser Pro Leu Phe Arg Pro Ser Gln Gly  
 20 25 30

Thr Gly Arg Val Pro Gly Thr Arg Gln Met Leu Gln Asp Ser Val Gln  
 35 40 45

Ala Ala Leu Glu Glu Val Ala Ala Ser Glu Ala Leu Leu Gly Pro Leu  
 50 55 60

Ser Pro Pro Gly Lys Ser Arg Asp Gly Asn Ala Ser Ala Gly Glu Gly  
 65 70 75 80

Cys Gln Val Phe Arg Ser Pro Pro Ser Glu Val Pro Ser Pro Pro Gly  
 85 90 95

Gln Asp Thr Pro Thr Ser Thr Phe Leu Lys Arg Arg Trp Asp Ser Gln  
 100 105 110

Val Thr Leu Leu Pro Ser Lys Lys Cys Lys Ser Gln Gln Leu Gln Glu  
 115 120 125

Ser Val Ser Gln Phe Pro Pro Ser Pro Gly Gly Arg Arg Glu Gly Pro  
 130 135 140

Trp Ser Ser Leu Gly Ala Gly Gly Pro Ser Ser His Ile Ser Ala Lys  
 145 150 155 160

Tyr Phe Pro Leu Pro Val Gln Pro Ala Cys Pro Cys Thr Ser Leu Glu  
 165 170 175

Ala Gly His Arg Pro Gly Arg Cys Val Asp Leu Gln Glu Ser Gln Gly  
 180 185 190

Val Asp His Pro Ala Asn Leu Arg Leu Ser Ser Gly Thr Ser Cys Arg  
 195 200 205

Arg Gly Leu Asn Pro Thr Pro Val Gln Val Arg Ser His Glu Ala Ser  
 210 215 220

Ser Gln Val Lys Met His Gln Thr Val Thr Trp Arg Phe Tyr Thr Phe  
225 230 235 240

Leu Asn Phe Gln Gln Leu Gly Ala Cys Leu Leu  
245 250

<210> 196  
<211> 149  
<212> PRT  
<213> *Homo sapiens*

<400> 196  
Phe Ala Lys Gly Leu Asp Arg Glu Arg Gly Asn Met Asn Leu Asp Arg  
1 5 10 15

Glu Gly Asp Thr Ile Glu Arg Arg Thr Leu Pro Thr Leu Gln Ala Ser  
           20                   25                   30

Asp Leu Pro Phe Glu Gly Thr Leu Asp Gly Gly Arg Gly Arg Gly Leu  
35 40 45

Gly Leu Ser Tyr Ser His Glu Leu Leu Ala Ser Thr Asp Ser Ser Asn  
50 55 60

Ser Pro Pro His Lys Ile Thr Gly Thr Asn Ile Phe Asn Phe Ala Tyr  
65 70 75 800

Leu Phe Leu Gly Glu Phe Pro Pro Ser Leu Phe Cys Pro Glu Thr Thr  
85 90 95

Gly Lys Ala Leu His Phe Glu Arg Glu Glu Lys Leu Phe Gly Thr Thr  
100 105 110

Pro Met Ile Phe Phe Phe Val Ile Leu Glu Ile Tyr Phe Phe Ile Ile  
115 120 125

Asn Asn Arg Lys Leu  
145

<210> 197  
<211> 143  
<212> PRT  
<213> *Homo sapiens*

<400> 197  
Gly Gln Arg Cys Pro Arg Gly Thr Asp Leu Pro Glu Ala Pro Thr Leu  
1 5 10 15

Pro Leu Trp Val Asn His Phe Ser Pro Gly Leu Ser Leu Arg Leu His  
20 25 30

Gln Leu Val Gly Leu Gln Ala Ser Pro Pro Asp Ser Pro His Cys Trp  
35 40 45

Ala	Thr	Leu	Asn	Leu	Lys	Phe	His	Cys	Pro	Ala	Pro	Pro	Thr	Pro	Thr
50						55				60					
Pro	Lys	Phe	Pro	Lys	Glu	Met	Ser	Lys	Thr	His	Ala	His	Thr	Tyr	Ile
65					70			75						80	
His	Thr	Cys	Thr	Cys	Ala	His	Thr	Ser	Cys	Val	Thr	Thr	Gly	Gln	Gly
					85			90					95		
Asn	Ala	Ser	Leu	Arg	Ile	Pro	Gly	Pro	Gly	Pro	Gly	Val	Lys	Gly	Cys
					100			105				110			
Ser	Gly	Thr	Leu	Pro	Pro	Asn	Leu	Leu	Gly	Gly	Pro	Pro	Ser	Val	Gly
					115			120				125			
Ala	Gly	Leu	Gly	Val	Cys	Leu	Asp	Ser	Gln	Asp	Leu	Pro	Arg	Ser	
					130			135				140			

&lt;210&gt; 198

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 198

Ser	His	Thr	Met	His	Cys	Lys	Glu	Thr	Lys	Gln	Leu	Tyr	Arg	Ser	Gly
1					5			10					15		

Asp	Ala	Ser	Val	Tyr	Asn	Thr	Phe	Met	Ser	Arg	Ile	Arg	Ser	Arg	His
							20			25			30		

Gln	Asp	Leu	Tyr	Thr	Val	Ala	Ala	Ile	Gly	Thr	Met	Ile	Gln	Asn
						35		40				45		

Ile	Lys	Tyr	Ile	Ser	Ile	Tyr	Ile	Asn	Thr	Gln	Leu	Gly	Trp	Gly	Arg
						50		55				60			

Met	Leu	Gly	Asp	Leu	Val	Ser	Pro	Ala	Glu	Gly	Leu	Gly	Gly	Arg	Glu
65					70				75				80		

Gly	Gly	Lys	Gly	Phe	Leu	Thr	Phe	Val	Leu	Asn	Asp	Gly	Ser	Glu
					85			90				95		

Gly	Arg	Arg	Glu	Met	Gly	Lys	His	Ser	Leu	His	Thr	Leu	Met	Cys	Ser
						100		105				110			

His	Thr	His	Ala	Gln	Thr	Lys	His	Arg	His	Arg	Arg	Val	Ser	Asn	Ser
						115		120				125			

Leu	Thr	Leu	Ile	Gly	Lys	Gln	Ala	Trp	Asp	Ile	Pro	Leu	Gln		
					130			135			140				

&lt;210&gt; 199

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 199  
 Gln Cys Arg Gly Phe Asn Leu Lys Ala Tyr Arg Asn Ala Ala Glu Ile  
 1 5 10 15  
 Val Gln Tyr Gly Val Lys Asn Asn Thr Thr Phe Leu Glu Cys Ala Pro  
 20 25 30  
 Lys Ser Pro Gln Ala Ser Ile Lys Trp Leu Leu Gln Lys Asp Lys Asp  
 35 40 45  
 Arg Arg Lys Glu Val Lys Leu Asn Glu Arg Ile Ile Ala Thr Ser Gln  
 50 55 60  
 Gly Leu Leu Ile Arg Ser Val Gln Gly Ser Asp Gln Gly Leu Tyr His  
 65 70 75 80  
 Cys Ile Ala Thr Glu Asn Ser Phe Lys Gln Thr Ile Ala Lys Ile Asn  
 85 90 95  
 Phe Lys Val Leu Asp Ser Glu Met Val Ala Val Val Thr Asp Lys Trp  
 100 105 110  
 Ser Pro Trp Thr Trp Ala Ser Ser Val Arg Ala Leu Pro Phe His Pro  
 115 120 125  
 Lys Asp Ile Met Gly Ala Phe Ser His Ser Glu Met Gln Met Ile Asn  
 130 135 140  
 Gln Tyr Cys Lys Asp Thr Arg Gln Gln His Gln Gln Gly Asp Glu Ser  
 145 150 155 160  
 Gln Lys Met Arg Gly Asp Tyr Gly Lys Leu Lys Ala Leu Ile Asn Ser  
 165 170 175  
 Arg Lys Ser Arg Asn Arg Asn Gln Leu Pro Glu Ser  
 180 185

<210> 200  
<211> 97  
<212> PRT  
<213> Homo sapiens

<220>  
<221> MOD\_RES  
<222> (97)  
<223> Any amino acid

<400> 200  
 Phe Phe Arg Glu Ala Glu Ser Pro Phe Val Ala Arg Leu Glu Cys Ser  
 1 5 10 15  
 Gly Ala Ile Ser Ala His Cys Ser Thr Val Ser Ala His Cys Ser Leu  
 20 25 30  
 Arg Pro Pro Val Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser  
 35 40 45

Trp Asp Tyr Arg Cys Ala Pro Pro Arg Pro Ala Asn Phe Cys Ile Phe  
 50 55 60

Ser Arg Asp Gly Val Ser Leu Cys Trp Pro Gly Trp Ser Gln Ser Arg  
 65 70 75 80

Pro Arg Asp Pro Ala His Leu Gly Leu Pro Lys Cys Trp Asp Tyr Arg  
 85 90 95

Xaa

<210> 201

<211> 354

<212> PRT

<213> Homo sapiens

<400> 201

Glu Thr Arg Val Lys Thr Ser Leu Glu Leu Leu Arg Thr Gln Leu Glu  
 1 5 10 15

Pro Thr Gly Thr Val Gly Asn Thr Ile Met Thr Ser Gln Pro Val Pro  
 20 25 30

Asn Glu Thr Ile Ile Val Leu Pro Ser Asn Val Ile Asn Phe Ser Gln  
 35 40 45

Ala Glu Lys Pro Glu Pro Thr Asn Gln Gly Gln Asp Ser Leu Lys Lys  
 50 55 60

His Leu His Ala Glu Ile Lys Val Ile Gly Thr Ile Gln Ile Leu Cys  
 65 70 75 80

Gly Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe  
 85 90 95

Ser Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr  
 100 105 110

Pro Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile  
 115 120 125

Ala Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val  
 130 135 140

Gly Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu  
 145 150 155 160

Ser Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu  
 165 170 175

Asp Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His  
 180 185 190

Asp Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala  
 195 200 205

Gly Thr Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu  
 210 215 220  
 Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe  
 225 230 235 240  
 Pro Gly Val Ser Val Leu Ala Gly Phe Thr Glu Lys Thr Pro Gly Phe  
 245 250 255  
 Glu Trp Lys Leu Thr Ala Glu Ser His Arg Pro Arg Gln Gln Gln Arg  
 260 265 270  
 Gln Gln Gln Thr Phe Gly Ile Leu Phe Ser Thr His Val Leu Ile Ile  
 275 280 285  
 His Leu Ile Ile Phe Leu Val Glu Lys Leu Gln Ile Ser Leu Phe Asn  
 290 295 300  
 Ile Tyr Ile Gln Phe Asn Lys Pro Leu Ala Ser Tyr Leu Phe Ser His  
 305 310 315 320  
 Leu Arg Tyr Phe Phe Pro Pro His Leu Ala Pro Val Pro Pro Phe Leu  
 325 330 335  
 Phe Ser Leu Cys Lys Arg Lys Tyr Leu Thr Tyr Leu Gly Pro Thr Ser  
 340 345 350

## Ile Met

<210> 202  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 202  
 Glu Lys Thr Pro Gly Phe Glu Trp Lys Leu Thr Ala Glu Ser His Arg  
 1 5 10 15

Pro Arg Gln Gln Gln Arg Gln Gln Thr Phe Gly Ile Leu Phe Ser  
 20 25 30

Thr His Val Leu Ile Ile His Leu Ile Ile Phe Leu Val Glu Lys Leu  
 35 40 45

Gln Ile Ser Leu Phe Asn Ile Tyr Ile Gln Phe Asn Lys Pro Leu Ala  
 50 55 60

Ser Tyr Leu Phe Ser His Leu Arg Tyr Phe Phe Pro Pro His Leu Ala  
 65 70 75 80

Pro Val Pro Pro Phe Leu Phe Ser Leu Cys Lys Arg Lys Tyr Leu Thr  
 85 90 95

Tyr Leu Gly Pro Thr Ser Ile Met  
 100

&lt;210&gt; 203

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 203

His	Lys	Lys	Asn	Phe	Trp	Gln	Ile	Phe	Ile	Gln	Ile	Ala	Cys	Leu	Gln
1				5					10					15	

Trp	Gln	Ile	Ser	Gln	His	Phe	Ser	Leu	Phe	Cys	Leu	Cys	Leu	Ser	Leu
					20			25					30		

Cys	Ile	Phe	Leu	Glu	Arg	Lys	Leu	Asn	Ala	Phe	Asn	Val	Leu	Ile	Ile
					35			40				45			

Thr	Leu	Leu	Lys	Leu	Asp	Pro	Asn	Met	Leu	Asn	Ile	Ser	Ser	Cys	Lys
					50			55			60				

Gly	Arg	Arg	Gly	Arg	Glu	Glu	Gln	Gly	Gln	Gly	Gly	Glu	Glu	Lys	Asn
					65		70		75			80			

Thr	Ser	Gly	Glu	Arg	Thr	Ser	Asn	Leu	Gln	Glu	Ala	Tyr		
					85			90						

&lt;210&gt; 204

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 204

Arg	Pro	Lys	Pro	Gly	His	Pro	Leu	Tyr	Ser	Lys	Tyr	Met	Arg	Gly	Asp
1					5				10			15			

Val	Leu	Val	Met	Leu	Lys	Gln	Thr	Glu	Asn	Asn	Tyr	Leu	Glu	Cys	Gln
					20			25			30				

Lys	Gly	Glu	Asp	Thr	Gly	Arg	Val	His	Leu	Ser	Gln	Met	Lys	Ile	Ile
					35			40			45				

Thr	Pro	Leu	Asp	Glu	His	Leu	Arg	Ser	Arg	Pro	Asn	Asp	Pro	Ser	His
					50			55		60					

Ala	Gln	Lys	Pro	Val	Asp	Ser	Gly	Ala	Pro	His	Ala	Val	Val	Leu	His
					65		70		75			80			

Asp	Phe	Pro	Ala	Glu	Gln	Val	Asp	Asp	Leu	Asn	Leu	Thr	Ser	Gly	Glu
					85			90			95				

Ile	Gly	Leu	Ser	Ser	Gly	Glu	Asp	Arg	Tyr	Arg	Leu	Val	Gln	Arg	Glu
					100			105			110				

Leu

&lt;210&gt; 205

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 205

Thr	Ser	Leu	Leu	Glu	Lys	Leu	Val	Tyr	Leu	Leu	Glu	Lys	Ile	Asp	Thr
1				5					10				15		

Asp	Trp	Tyr	Arg	Gly	Asn	Cys	Arg	Asn	Gln	Ile	Gly	Ile	Phe	Pro	Ala
					20			25				30			

Asn	Tyr	Val	Lys	Val	Ile	Ile	Asp	Ile	Pro	Glu	Gly	Gly	Asn	Gly	Lys
					35			40				45			

Arg	Glu	Cys	Val	Ser	Ser	His	Cys	Val	Lys	Gly	Ser	Arg	Cys	Val	Ala
					50			55			60				

Arg	Phe	Glu	Tyr	Ile	Gly	Glu	Gln	Lys	Asp	Glu	Leu	Ser	Phe	Ser	Glu
					65			70			75		80		

Gly	Glu	Ile	Ile	Ile	Leu	Lys	Glu	Tyr	Val	Asn	Glu	Glu	Trp	Ala	Arg
					85			90				95			

Gly	Glu	Val	Arg	Gly	Arg	Thr	Gly	Ile	Phe	Pro	Leu	Asn	Phe	Val	Glu
					100			105			110				

Pro	Val	Glu	Asp	Tyr	Pro	Thr	Ser	Gly	Ala	Asn	Val	Leu	Ser	Thr	Lys
					115			120			125				

Val	Pro	Leu	Lys	Thr	Lys	Lys	Glu	Asp	Ser	Gly	Ser	Asn	Ser	Gln	Val
					130			135			140				

Asn	Ser	Leu	Pro	Ala	Glu	Trp	Cys	Glu	Ala	Leu	His	Ser	Phe	Thr	Ala
					145			150			155		160		

Glu	Thr	Ser	Asp	Asp	Leu	Ser	Phe	Lys	Arg	Gly	Asp	Arg	Ile	Gln	Ile
					165			170			175				

Leu	Glu	Arg	Leu	Asp	Ser	Asp	Trp	Cys	Arg	Gly	Arg	Leu	Gln	Asp	Arg
					180			185			190				

Glu	Gly	Ile	Phe	Pro	Ala	Val	Phe	Val	Arg	Pro	Cys	Pro	Ala	Glu	Ala
					195			200			205				

Lys	Ser	Met	Leu	Ala	Ile	Val	Pro	Lys	Gly	Gln	Glu	Gly	Gln	Ser	Leu
					210			215			220				

Ile

225

&lt;210&gt; 206

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 206

Cys Ile Gly Phe Ser Ser Gly Phe Asp Lys Val Lys Arg Ile Val Thr  
 1 5 10 15

Arg Val Thr Gln Thr Cys Gln Leu Ser Glu Ser Leu Val Val Lys Pro  
 20 25 30

Glu Leu Gly Lys Leu Ser Leu Arg Arg Leu Lys Glu Arg Ala Gln Val  
 35 40 45

Gly Ile Cys Val Ile Thr Val Leu Leu Pro Arg His Gly Val Asp Asn  
 50 55 60

Lys Ile Pro Leu Gln Ser Thr Gly Val Ser Val Arg Leu Val Leu Gln  
 65 70 75 80

Lys Ala Ala His Trp Glu Trp Gly Gly Ala Cys Gly Lys Pro Asp Cys  
 85 90 95

Gly Glu Lys Leu Gly Glu Asn Gly Ser  
 100 105

<210> 207  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 207  
 Leu Cys Gly Ala Ala Ala Ser Cys Met Met Leu Gly Ser Leu Ala Pro  
 1 5 10 15

Asp Pro Gly Ser Arg Arg His Ser Gly Gln Ala Ala Leu Arg Pro Arg  
 20 25 30

Arg Tyr Pro Thr Leu Trp Asp Arg Cys Arg Lys Arg Trp Leu Arg Pro  
 35 40 45

Ile Phe Thr Gln Leu Leu Ala Ala Val Trp Leu Thr Thr Arg Ser Ser  
 50 55 60

Pro Phe Pro Val Ser Arg Phe Leu Gln His Gln Ala Asn Thr Tyr Thr  
 65 70 75 80

Ser Ala Leu

<210> 208  
 <211> 581  
 <212> PRT  
 <213> Homo sapiens

<400> 208  
 Tyr Phe Cys Met Met Thr Glu Ala Glu Gln Asp Lys Trp Gln Ala Val  
 1 5 10 15

Leu Gln Asp Cys Ile Arg His Cys Asn Asn Gly Ile Pro Glu Asp Ser  
 20 25 30

Lys Val Glu Gly Pro Ala Phe Thr Asp Ala Ile Arg Met Tyr Arg Gln  
     35                        40                        45  
  
 Ser Lys Glu Leu Tyr Gly Thr Trp Glu Met Leu Cys Gly Asn Glu Val  
     50                        55                        60  
  
 Gln Ile Leu Ser Asn Leu Val Met Glu Glu Leu Gly Pro Glu Leu Lys  
     65                        70                        75                        80  
  
 Ala Glu Leu Gly Pro Arg Leu Lys Gly Lys Pro Gln Glu Arg Gln Arg  
     85                        90                        95  
  
 Gln Trp Ile Gln Ile Ser Asp Ala Val Tyr His Met Val Tyr Glu Gln  
     100                       105                       110  
  
 Ala Lys Ala Arg Phe Glu Glu Val Leu Ser Lys Val Gln Gln Val Gln  
     115                       120                       125  
  
 Pro Ala Met Gln Ala Val Ile Arg Thr Asp Met Asp Gln Ile Ile Thr  
     130                       135                       140  
  
 Ser Lys Glu His Leu Ala Ser Lys Ile Arg Ala Phe Ile Leu Pro Lys  
     145                       150                       155                       160  
  
 Ala Glu Val Cys Val Arg Asn His Val Gln Pro Tyr Ile Pro Ser Ile  
     165                       170                       175  
  
 Leu Glu Ala Leu Met Val Pro Thr Ser Gln Gly Phe Thr Glu Val Arg  
     180                       185                       190  
  
 Asp Val Phe Phe Lys Glu Val Thr Asp Met Asn Leu Asn Val Ile Asn  
     195                       200                       205  
  
 Glu Gly Gly Ile Asp Lys Leu Gly Glu Tyr Met Glu Lys Leu Ser Arg  
     210                       215                       220  
  
 Leu Ala Tyr His Pro Leu Lys Met Gln Ser Cys Tyr Glu Lys Met Glu  
     225                       230                       235                       240  
  
 Ser Leu Arg Leu Asp Gly Leu Gln Gln Arg Phe Asp Val Ser Ser Thr  
     245                       250                       255  
  
 Ser Val Phe Lys Gln Arg Ala Gln Ile His Met Arg Glu Gln Met Asp  
     260                       265                       270  
  
 Asn Ala Val Tyr Thr Phe Glu Thr Leu Leu His Gln Glu Leu Gly Lys  
     275                       280                       285  
  
 Gly Pro Thr Lys Glu Glu Leu Cys Lys Ser Ile Gln Arg Val Leu Glu  
     290                       295                       300  
  
 Arg Val Leu Lys Lys Tyr Asp Tyr Asp Ser Ser Ser Val Arg Lys Arg  
     305                       310                       315                       320  
  
 Phe Phe Arg Glu Ala Leu Leu Gln Ile Ser Ile Pro Phe Leu Leu Lys  
     325                       330                       335

Lys Leu Ala Pro Thr Cys Lys Ser Glu Leu Pro Arg Phe Gln Glu Leu  
 340 345 350  
 Ile Phe Glu Asp Phe Ala Arg Phe Ile Leu Val Glu Asn Thr Tyr Glu  
 355 360 365  
 Glu Val Val Leu Gln Thr Val Met Lys Asp Ile Leu Gln Ala Val Lys  
 370 375 380  
 Glu Ala Ala Val Gln Arg Lys His Asn Leu Tyr Arg Asp Ser Met Val  
 385 390 395 400  
 Met His Asn Ser Asp Pro Asn Leu His Leu Leu Ala Glu Gly Ala Pro  
 405 410 415  
 Ile Asp Trp Gly Glu Glu Tyr Ser Asn Ser Gly Gly Gly Ser Pro  
 420 425 430  
 Ala Pro Ala Pro Arg Ser Gln Pro Pro Ser Arg Lys Ser Asp Gly Ala  
 435 440 445  
 Pro Ser Arg Trp Ser Leu Trp Ser Arg Met Arg Arg Trp Gly Cys Pro  
 450 455 460  
 Leu Arg Leu Ala Leu Ser His His His Leu Arg Pro Arg Thr Val Ser  
 465 470 475 480  
 Leu Arg Ser Glu Ala Cys Trp Pro Lys Val Cys Gly Leu Arg Ala Pro  
 485 490 495  
 His Gln Pro Ala Pro Cys Ser Thr Gly Pro Pro Leu Gly Arg Val Pro  
 500 505 510  
 Ser Leu Arg Pro Pro Pro Arg Pro Pro Arg Arg Leu Pro His Pro Ser  
 515 520 525  
 Ser Ile Ser Cys Leu Glu Arg Leu Trp Thr Leu Gly Pro Pro Ser Pro  
 530 535 540  
 Ala Thr Arg Arg Leu Glu Ser Arg Cys Pro Ala Pro Ala Ala Thr Pro  
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 Pro Ser Thr Pro Pro Pro Arg Thr Val Gln Gly Cys Arg Leu Ser Ser  
 565 570 575  
 Arg Pro Val Gly Pro  
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 <212> PRT  
 <213> Homo sapiens

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 Pro Gln Arg Ala Ala Pro Pro Pro His Pro Gly Pro Gln Arg Pro Pro  
 1 5 10 15

Ala Trp Arg Ala Val Ala Phe Pro Arg Gly Trp Leu Thr Pro Gly Cys  
                  20                     25                         30  
  
 Trp Gly Trp Ala Ala Ala Pro Ala Ala Val Ala Val Leu Leu Ala Pro  
                  35                     40                         45  
  
 Val Asp Gly Gly Ala Leu Gly Gln Gln Val Gln Val Gly Val Ala Val  
                  50                     55                         60  
  
 Val His Asp His Ala Val Pro Val Glu Val Val Leu Pro Leu His Arg  
                  65                     70                     75                 80  
  
 Gly Leu Leu His Ser Leu Gln Asp Val Leu His Asp Gly Leu Gln His  
                  85                     90                         95  
  
 His Leu Leu Val Arg Val Phe His Gln Asp Glu Pro Gly Lys Val Leu  
                  100                    105                        110  
  
 Glu Asp Gln Leu Leu Glu Pro Gly Gln Leu Arg Leu Ala Gly Arg Gly  
                  115                    120                        125  
  
 Gln Leu Leu Glu Gln Glu Arg Asp Ala Asp Leu Gln Gln Arg Leu Pro  
                  130                    135                        140  
  
 Glu Glu Pro Leu Pro His Arg Ala Ala Val Val Val Val Phe Leu Gln  
                  145                    150                     155                 160  
  
 His Pro Leu Gln Asp Pro Leu Asp Gly Leu Ala Gln Leu Leu Leu Gly  
                  165                    170                        175  
  
 Gly Pro Leu Pro Gln Leu Leu Val Gln Glu Gly Leu Glu Arg Ile His  
                  180                    185                        190  
  
 Gly Ile Val His Leu Leu Pro His Val Asp Leu Gly Ser Leu Leu Glu  
                  195                    200                        205  
  
 His Gly Arg Ala Gly His Ile Lys Ser Leu Leu Gln Pro Val Gln Ser  
                  210                    215                        220  
  
 Gln Arg Leu His Leu Leu Ile Ala Ala Leu His Leu Gln Gly Val Val  
                  225                    230                        235                 240  
  
 Arg Gln Pro Gly Gln Leu Leu His Val Leu Ala Gln Leu Val Asn Ala  
                  245                    250                        255  
  
 Ala Leu Val Asp Asp Val Gln Val His Val Arg Asp Leu Leu Glu Glu  
                  260                    265                        270  
  
 Asp Ile Ser His Leu Ser Glu Ala Leu Ala Gly Gly Asp His Gln Gly  
                  275                    280                        285  
  
 Leu Gln Asp Gly Trp Asp Val Gly Leu Asp Met Val Pro His Ala His  
                  290                    295                        300  
  
 Leu Cys Leu Gly Glu Asp Glu Gly Ser Asp Leu Ala Gly Lys Val Leu  
                  305                    310                        315                 320  
  
 Leu Gly Gly Asp Asn Leu Val His Val Ser Ser Asp Asp Gly Leu His

127

325

330

335

Gly Arg Leu His Leu Leu His Leu Gly Gln His Leu Leu Glu Ala Arg  
340 345 350

Leu Gly Leu Leu Val His His Val Val His Gly Val Arg Asp Leu Asp  
355 360 365

Pro Leu Pro Leu Pro Leu Leu Arg Phe Pro Leu Gln Pro Arg Ala Glu  
370 375 380

Leu Cys Leu Gln Leu Arg Ala Gln Leu Leu His His Gln Val Ala Gln  
385 390 395 400

Asp Leu His Leu Val Pro Thr Gln His Leu Pro Gly Ala Val Gln Leu  
405 410 415

Leu Gly Leu Ser Val His Ala Asp Gly Ile Cys Glu Arg Arg Ala Leu  
420 425 430

Tyr Leu Gly Val Leu Arg Asp Ser Ile Val Ala Val Pro Asp Ala Val  
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Leu Gln His Ser Leu Pro Leu Val Leu Leu Gly Phe Cys His His Ala  
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Glu Val  
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29